



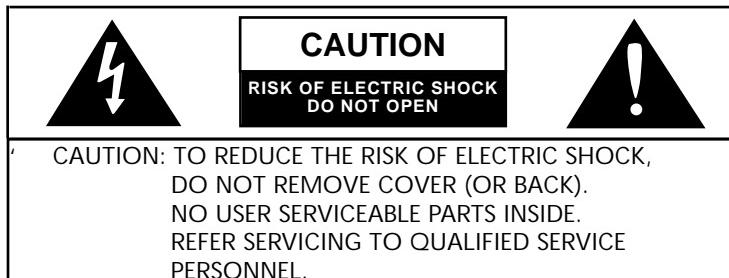
DIRECTV® High-Definition Receiver

Owner's Manual

Model SIR-TS160

Warning! Important Safety Instructions

SAMSUNG



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer: This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Important: One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.



Always be careful when using this product. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your DIRECTV® High-Definition Receiver.

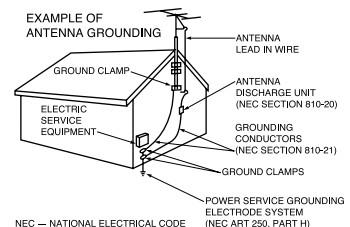
IMPORTANT SAFETY INSTRUCTIONS

- Read all safety and operating instructions before operating this product.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the product and in the operating instructions.
- Follow all operating and use instructions.

Warning! Important Safety Instructions

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- Unplug the product from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the product where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the product and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the product. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the product on a rack or bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.
- Operate your product only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this product is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.
- Protect the power cord. Power supply cords should be routed so that they will not be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the product from the wall outlet and disconnect the antenna or cabling during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the product.
- Ground outdoor antennas. If an outside antenna is connected to the product, be sure the antenna is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



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- Do not attempt to service the product yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - when the power-supply cord or plug is damaged
 - if liquid has been spilled on the unit or if objects have fallen into the unit
 - if the product has been exposed to rain or water
 - if the product does not operate normally by following the operating instructions
 - if the product has been dropped or the cabinet has been damaged
 - when the product exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in a safe operating condition.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
(2) This device must accept any interference that may cause undesired operation.**

This satellite receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

Notices

Attention

Telephone Line Interruption

A continuous land-based phone line connection is required for DIRECTV® Pay Per View functionality and sports subscriptions. Any calls generated by the DIRECTV® High-Definition Receiver are toll free. These calls are typically made in the middle of the night; your phone is in use for approximately 30 seconds.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Macrovision Information

This equipment incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology is granted by Macrovision for home and other limited DBS IRD pay per view uses only. Reverse engineering or disassembly is prohibited.

Program Recording Restrictions

Programming may be taped for home viewing only. All other taping is expressly prohibited. Some programming may not be taped. An additional taping fee may be applied. Call your program provider for details.

High definition broadcast copyright limitations

Due to copyright restrictions, you may not be able to view some high definition programs in high definition format using this product. (Also, whenever possible you should connect both HD and SD interfaces to permit SD viewing of programs if HD viewing is restricted due to copyright restrictions.)

Owner's Record

The model and serial numbers are located on the bottom of the DIRECTV® High-Definition Receiver. The number for the Access Card is on the back of the card and on the carton label. Record these numbers for reference when calling your sales or service representative regarding this product.

Model Number: _____

Serial Number: _____

Access Card Number: _____

Customer Support

For DIRECTV® Programming

For subscription information, or to resolve problems related to programming, call: DIRECTV at 1-800-DIRECTV (1-800-347-3288) or visit the DIRECTV Web site (DIRECTV.com).

For Installation

To arrange for the installation of your DIRECTV HD Receiver, call the dealer from whom you purchased your system.

For Hardware

To resolve problems related to this DIRECTV HD Receiver, call Samsung Customer Support at 1-800-522-2946.

SAMSUNG DIGITAL SATELLITE RECEIVER

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One (1) Year Parts and Labor*
(*90 Days Parts and Labor for Commercial Use)

This limited warranty begins on the original date of purchase, and is valid only on products purchased and used in the United States. To receive warranty service, the purchaser must contact SAMSUNG for problem determination and service procedures. Warranty service can only be performed by a SAMSUNG authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to SAMSUNG or SAMSUNG's authorized service center. Transportation of the product to and from the service center is the responsibility of the purchaser.

SAMSUNG will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of SAMSUNG and must be returned to SAMSUNG. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer.

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adjustments and failure to follow operating instructions, cleaning, maintenance and environmental instructions that are covered and prescribed in the instruction book; product removal or reinstallation; reception problems and distortion related to noise, echo, interference or other signal transmission and delivery problems. SAMSUNG does not warrant uninterrupted or error-free operation of the product.

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To obtain warranty hardware service, please contact SAMSUNG at:

SAMSUNG CUSTOMER SERVICE

400 VALLEY ROAD, SUITE 201, MT ARLINGTON, NJ 07856, TEL: 973-601-6000, FAX: 973-601-6001
1-800-522-2946 and SAMSUNGUSA.COM

Table of Contents



Chapter 1: Technical overview	3
What are Analog TV, DTV, NTSC, ATSC, SDTV, and HDTV?	3
What kinds of TV programming can I watch with the DIRECTV® High-Definition Receiver?	4
What equipment is required to view HDTV programming?	4
Resolution and interlacing	5
Video output options.....	5
Aspect ratio	7
Screen formats.....	7
Dolby® Digital 5.1	11
Chapter 2: Getting started	12
Box contents.....	12
Front panel controls and lights.....	13
Back of the DIRECTV High-Definition Receiver	14
Installing the batteries in the remote control.....	16
Inserting the Access Card	17
Chapter 3: Setting up and connecting	18
Before making connections.....	18
Jacks and cables	19
Connecting your DIRECTV High-Definition Receiver	22
Connecting the VCR control cable	27
Turning on the DIRECTV High-Definition Receiver for the first time	28
Adjusting up the satellite dish.....	28
Testing your DIRECTV High-Definition Receiver	34
Setting up local networks	35
Scanning off-air and cable TV channels	35
Activating your DIRECTV account	37
Upgrades.....	37
Chapter 4: Watching TV	38
Remote control overview.....	38
Changing channels	40
Adjusting the volume	40
Getting help	40
Getting information on the TV program you are watching	41
Finding out what's on: the Guides	44

Table of Contents



Searching for programs in the Guide	53
Choosing an alternate audio format for a program.....	55
Changing the User setting	56
Pay per view programs.....	56
Chapter 5: Program reminders and recording timers	60
Setting up the VCR control	60
Scheduling program reminders and recording timers	61
Reviewing and modifying reminders and recording timers.....	62
Chapter 6: User profiles.....	64
User profiles basics	64
Editing user profile names.....	65
Editing channel lists	67
Setting ratings limits	68
Allowing or blocking pay per view purchases	71
Setting a pay per view spending limit	72
Setting the screen color and translucency	73
Setting the current user profile	74
Locking and unlocking your DIRECTV® System.....	74
Chapter 7: Settings, preferences, upgrades, and extras	76
Reading your mail	76
Setting system preferences	77
Reviewing and controlling caller ID	83
Setting the <i>Local Time</i> options	85
Installing a new Access Card	87
Viewing important information and a list of features supported by your DIRECTV® High-Definition Receiver	88
Viewing information on automatic system upgrades	88
Viewing fun system extras.....	88
Chapter 8: Programming the remote control	89
Programming the remote control.....	89
Operating a device with your programmed remote control	90
Code lists.....	91
Appendix: Troubleshooting and specifications	97
Troubleshooting	97
Specifications	99
Index.....	101

Chapter 1: Technical overview

This chapter explains the technical capabilities of the DIRECTV® High-Definition Receiver, and provides background information on digital television. Topics covered here include:

- What are Analog TV, Digital TV, NTSC, ATSC, SDTV, and HDTV?
- What kinds of TV programming can I watch with the DIRECTV HD Receiver?
- What equipment is required to view HDTV programming?
- Resolution and interlacing
- Video output options
- Aspect ratio
- Screen formats
- Dolby® Digital 5.1

What are Analog TV, Digital TV, NTSC, ATSC, SDTV, and HDTV?

Analog TV

Analog TV is the TV you're probably most familiar with. Most of the TV broadcasts you receive via a standard off-air antenna or from your local cable company are analog TV broadcasts.

Digital TV

Digital television (sometimes called DTV) is a newer method of broadcasting TV signals that delivers higher quality audio and video. Digital TV is broadcast in two sets of formats, SDTV and HDTV.

NTSC

NTSC (National Television Standards Committee) refers to the group that first established the standards used for conventional analog television broadcasts and TV equipment.

ATSC

ATSC (Advanced Television Systems Committee) is the group who have been working to establish the standards for digital television broadcasts and digital television equipment — including both SDTV and HDTV.

SDTV

SDTV is a digital TV format that provides a high quality picture at resolutions that can be displayed on standard TV sets (see more on resolutions later in this chapter).

HDTV

HDTV is a digital TV format that provides the highest quality picture at resolutions that can be displayed on computer monitors and HDTV-ready TV displays.

What kinds of TV programming can I watch with the DIRECTV® High-Definition Receiver?

The DIRECTV HD Receiver provides you with the ability to receive television programs from a wide range of sources, and to display them on virtually any TV or monitor.

Using the Air In, Satellite In, and Cable In jacks on the back of the DIRECTV HD Receiver, you can receive television programs from:

- HDTV and SDTV DIRECTV® programming via digital satellites (through the Satellite In jack).
- Local off-air analog television broadcasts (NTSC), and local off-air digital broadcasts (ATSC) (through the Air In jack).
- Unscrambled analog cable TV services for unscrambled cable programming (through the Cable In jack).

To view cable TV or DIRECTV programming, programming subscriptions are also required.

What equipment is required to view HDTV programming?

To view HDTV programming, in addition to your DIRECTV HD Receiver, you will need an HDTV monitor or television set. For DIRECTV High-Definition programming, you'll also need an oval triple LNB multi-satellite dish, including a Sat C LNB (a dish that can receive signals from all 3 of the satellite locations providing DIRECTV programming).

To receive analog and digital off-air television broadcasts, you'll need an off-air antenna. To receive cable TV programming, you'll need a cable TV connection (provided by your local cable TV service provider).

Resolution and interlacing

Two of the elements that determine the quality of a TV picture are resolution and interlacing.

- Resolution: For TV equipment and broadcasts, resolution is defined by the number of horizontal lines displayed to make up each frame of a video image. The more lines of resolution used to draw each frame of video, the more detailed and sharp the picture will be. Standard TV resolution uses 480 horizontal lines to make up each frame of video. HDTV uses either 720 lines, or 1080 lines to make each video frame.
- Interlacing: When TVs display video, they display a new video frame at a rate that is faster than your eye can see (from 24 to 60 frames per second, depending on the TV and broadcast). Interlacing refers to whether each of those frames contains all of the lines of video for each frame or every other line. Interlaced signals take every other line from 2 frames of video (each lasting 1/60th of a second), and combine them into one frame lasting 1/30th of a second. In this way, interlacing tricks your eye into thinking it is seeing twice the resolution that is actually being displayed.

In non-interlaced video, (referred to as progressive scan video), video frames are displayed every 1/60th of a second containing all of the lines of video information for each frame.

The specifications for video resolutions are usually stated by giving the number of horizontal lines, followed by either the letter i, for interlaced video, or p for progressive scan video. Most standard TV broadcasts are 480i (480 lines of interlaced video resolution). Some DVDs and non-HDTV digital TV broadcasts use 480p. The ATSC specification for HDTV broadcasts and equipment requires either 1080i or 720p. While there is some debate as to whether it is better to have more lines that are interlaced (1080i), or fewer lines that are progressively scanned (720p), it is generally accepted that 1080i is the highest quality video format.

Video output options

The DIRECTV® High-Definition Receiver is able to receive broadcasts in any of the resolutions mentioned above. It can also display programs on TVs capable of displaying any of those resolutions.

To set up your DIRECTV HD Receiver to handle the combinations of incoming video formats and TV display capabilities, you simply set the Resolution switch on the back panel to match the highest resolution your TV is capable of displaying. (If you're not sure about your TV's resolution, see your TV's manual for this specification.) The DIRECTV HD Receiver will then do the appropriate conversion from input signal format to display format.

The table below details the results you get with each combination of input signal format and TV display format.

If the program signal is in any of these formats: 1080i, 720p, 480p or 480i		
With the Resolution switch set to:	The Component, RGB and DVI jacks will output:	The Video Out, TV Out, and S-Video jacks will output:
1080i	1080i	480i
720p	720p	480i
480p/i	480p	480i

For example, if you have a standard resolution TV, you would set the Resolution switch to 480p/i. Then programs received by the DIRECTV® High-Definition Receiver at any resolution would be converted to a resolution of 480p or 480i for display on your television.

This information can also be helpful when deciding how to connect your TV and VCR to the DIRECTV HD Receiver. For example, if you have a High Definition TV capable of displaying 1080i, and a standard VCR, you would want to use the COMPONENT, RGB or DVI jacks (whichever your TV accepts) to connect the DIRECTV HD Receiver to your TV. You would then use the VIDEO OUT jack to connect your VCR. This will provide each device with the highest quality video signal it is capable of using.

Note: If you connect your TV to one of the composite video out jacks (VIDEO OUT, S-VIDEO OUT, or TV OUT), and you view a high-definition program with the DIRECTV HD Receiver's RESOLUTION switch set to either 720p or 1080i, the picture will be slightly cropped at the top and bottom (the very top and bottom edges of the image will not appear on the TV screen). To avoid this problem, set the RESOLUTION switch to the 480p/i position if your TV is connected to one of the composite video outputs.

Also, since the RGB, COMPONENT and DVI jacks do not output the 480i video format, do not connect a standard definition TV capable of displaying only 480i video to the RGB, COMPONENT or DVI jacks.

If you use the DVI jack, for the best access to high-definition programming, connect the DVI/HDCP output to the corresponding DVI/HDCP input on your High-Definition Television (HDTV) or HDTV Monitor that supports High-bandwidth Digital Content Protection (HDCP) technology.

Aspect ratio

In addition to resolution and interlacing, HDTV is also defined by the aspect ratio of its broadcasts. Aspect ratio means the shape of the screen as defined by the ratio of the screen's width to its height. For analog TV and SDTV, the aspect ratio is 4 units wide by 3 units high (usually written 4:3). This is the familiar shape of conventional TVs — slightly wider than they are tall.

For HDTV broadcasts, the aspect ratio is 16:9 (nearly twice as wide as it is tall). This is, not coincidentally, more like the shape of movies shown in theaters. This makes HDTV an ideal format for broadcasting and viewing movies on a TV.

But what happens if you are watching a nearly square-shaped 4:3 broadcast on a rectangular 16:9 TV, or vice-versa? The DIRECTV® High-Definition Receiver allows you to choose from a variety of screen formats to help you deal with those scenarios.

Screen formats

To deal with the mismatches that can occur between the shapes of TVs and the aspect ratios of program broadcasts, the DIRECTV HD Receiver provides you with a set of screen format controls. These controls allow you to pick a format to use for both 4:3 TVs showing 16:9 programs, and for 16:9 TVs showing 4:3 programs. Here is an explanation of the options. (Details for setting this preference are included in Chapter 7.)

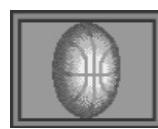
4:3 TVs showing 16:9 programs

For a standard 4:3 TV showing a widescreen program, the program is too wide to fit on the screen. The DIRECTV® High-Definition Receiver gives you 3 ways to fix the problem:

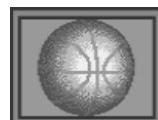
Letter box: If you choose the letter box format, the 16:9 image is shrunk until the entire width of the program fits on your TV. Since the aspect ratio of the program is maintained, the image is no longer tall enough to fill your screen, so black/gray bars are seen at the top and bottom of the screen.



Full: If you set your DIRECTV HD Receiver to the Full setting, 16:9 images are shrunk to fit the width of the screen, like in the Letter box format. But instead of applying black/gray bars to the top and bottom of the screen, the program image is stretched vertically until it is tall enough to fill your screen. Your entire TV screen is full, but the program images are a little stretched to compensate for the program – to – screen mismatch.



Zoom: The third screen format option is to magnify the image, keeping the 16:9 aspect ratio intact, until your entire screen is filled. This eliminates the distortion present in the Full option, but as the image becomes tall enough to fit your screen, it pushes some of the program content off the left and right edges of the screen.



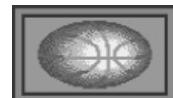
16:9 TVs showing 4:3 programs

For a wide screen 16:9 TV showing a standard 4:3 TV program, the program is too tall to fit on the screen. The DIRECTV® High-Definition Receiver gives you 3 ways to fix the problem:

Pillar box: If you choose the pillar box format, the 4:3 image is shrunk until the entire height of the program fits on your TV. Since the aspect ratio of the program is maintained, the image is no longer wide enough to fill your screen, so black/gray bars are seen at the left and right edges of the screen.



Full: If you set your DIRECTV HD Receiver to the Full setting, 4:3 images are shrunk to fit the height of the screen, like in the Pillar box format. But instead of applying black/gray bars to the sides of the screen, the program image is stretched horizontally until it is wide enough to fill your screen. Your entire TV screen is full, but the program images are a little stretched to compensate for the program – to – screen mismatch.



Zoom: In this option the program image is magnified until your entire screen is filled while keeping the 4:3 aspect ratio intact. This eliminates the distortion present in the Full option, but as the image becomes wide enough to fit your screen, it pushes some of the program content off the top and bottom edges of the screen.



These 2 tables summarize your screen format options:

If your display is a 4:3 format TV or monitor, your format options include these:

For 4:3 program signals:	
For 16:9 program signals:	

* Note: Letter box is not available through the composite output jacks (Video Out, S-Video Out, and TV Out jacks) when the RESOLUTION SELECT switch is set to 1080i and the source signal is 1080i.

If your display is a 16:9 format TV or monitor, your format options include these:

For 4:3 program signals:	
For 16:9 program signals:	

For either of these scenarios, the option you choose is a matter of preference. The FORMAT button on your remote control allows you to cycle through the formats available for your display type.

Note: You can set the color of the horizontal or vertical bars displayed for Letter box and Pillar box screen formats to either black or gray. See Chapter 7 for details.

Dolby® Digital 5.1

Just as the ATSC has specified 1080i or 720p as the video formats required for HDTV, they have also specified a recommended audio format: Dolby Digital 5.1. Dolby Digital 5.1 provides 5 discrete channels of digital audio information for use by A/V receivers capable of decoding the 5.1 channel signal. The audio signals are broken into left-front, center, right-front, left-rear, right-rear and a low-frequency effects channel (designed for subwoofers). The result when connected to a compatible Dolby Digital 5.1 channel A/V receiver and speaker setup is a home theater experience that provides much of the dynamic range, 360-degree imaging, and sonic excitement of a real theater.

Not all Digital TV programming is broadcast using Dolby Digital 5.1. For DIRECTV® programming, you can see which programs are broadcast using this high-quality audio standard by checking the Info Banners and Program Guides for the Dolby Digital icon ().

To take full advantage of the Dolby Digital 5.1 capabilities of the DIRECTV® High-Definition Receiver, you will need a Dolby Digital 5.1 compatible A/V receiver connected to the DIRECTV HD Receiver through the Dolby Digital Optical jack or the Dolby Digital Coaxial jack.

Chapter 2: Getting started

This chapter tells you everything you need to know before you start setting up and using your DIRECTV® High-Definition Receiver. It includes information on:

- Box contents
- Front panel controls and lights
- Back of the DIRECTV HD Receiver
- Installing the batteries in the remote control
- Inserting the Access Card

Box contents

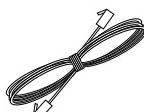
Welcome! The first step in setting up your DIRECTV HD Receiver is to unpack the box and familiarize yourself with its contents. If you are missing any items, contact your Samsung dealer.



DIRECTV HD Receiver



AAA size
batteries



RJ-11
Telephone cord



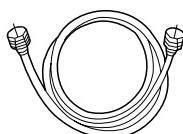
Access Card



Remote control



DVI cable



RF coaxial cable



A/V cable



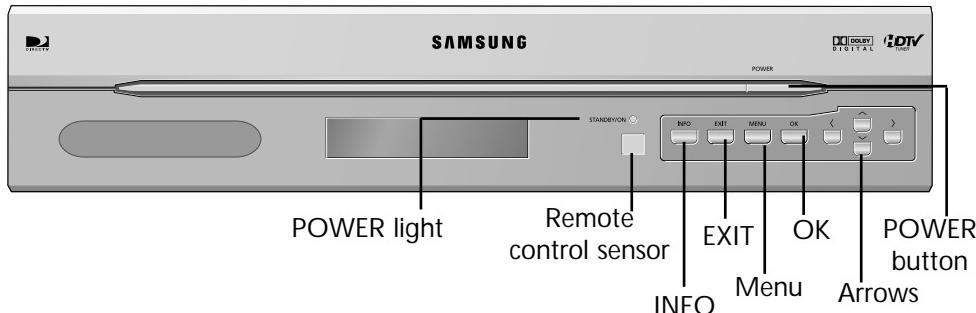
S-Video cable



VCR control cable

Front panel controls and lights

Now that you've unpacked the box, take a moment to take a look at the buttons and lights on the front of your DIRECTV® High-Definition Receiver. (You need to open the front door by holding both sides of the front panel and pulling it towards you.)



POWER button and light

Push this button to turn your DIRECTV HD Receiver on or off. The light glows when power is on.

Remote control sensor

Point your remote control at this sensor when operating your receiver.

INFO

Push this button to display TV program information.

EXIT

Push this button to clear on-screen displays and return to TV program viewing.

MENU

Push this button to display the Main Menu.

Arrows

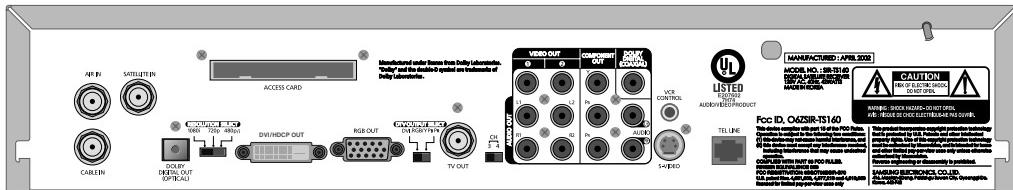
Push these buttons to navigate in the on-screen Guide and menu system.

OK

Push this button to select highlighted items on Guide and Menu screens.

Back of the DIRECTV® High-Definition Receiver

The diagram below illustrates the location of the input and output jacks on the back of the receiver. These illustrations may help you as you set up your DIRECTV HD Receiver. Step-by-step setup instructions appear in Chapter 3.



AIR IN

The cable from an off-air TV antenna (*not* from the satellite dish) connects to this jack. Both standard analog (NTSC) and high definition digital (ATSC) program broadcasts can be received through a single antenna connected to this jack.

SATELLITE IN

The RG-6 cable from the satellite dish connects to this jack.

CABLE IN

The RG-6 cable from cable TV provider (if you have one) connects to this jack.

ACCESS CARD slot

This slot holds the Access Card (which allows you to view DIRECTV® programming).

VIDEO OUT

Using standard video cables, these jacks connect your DIRECTV HD Receiver to your TV or VCR.

AUDIO OUT (L1, R1, L2, R2)

Using standard stereo audio cables, these jacks provide stereo audio to your TV, VCR, or A/V receiver.

AUDIO (Lt, Rt)

Using standard stereo audio cables, these jacks provide an A/V receiver capable of decoding Dolby Prologic signals with the left, right, center, and surround audio channel signals.

S-VIDEO

This jack connects your DIRECTV HD Receiver to a TV or VCR that accepts S-Video input.

COMPONENT OUT (Y Pb Pr video)

Using standard A/V cables, these jacks connect your DIRECTV® High-Definition Receiver to a TV or VCR that accepts high-definition component video input.

RGB OUT

Using an RGB monitor cable, this jack connects your DIRECTV HD Receiver to a TV that accepts high-definition RGB video input.

DVI / HDCP OUT

Using a digital DVI cable, this jack connects your DIRECTV HD Receiver to a TV that accepts the unconverted DVI signal from a high-definition digital broadcast (from satellite, or antenna). Supports HDCP content protection. (For the best access to high-definition programming, connect this output to the corresponding DVI/HDCP input that supports HDCP technology on your HDTV or HDTV Monitor.)

DOLBY DIGITAL OUT (OPTICAL)

Using an optical digital audio cable, this jack allows you to connect your DIRECTV HD Receiver to an A/V receiver that accepts optical digital audio input.

DOLBY DIGITAL (COAXIAL)

Using a coaxial digital audio cable, this jack allows you to connect your DIRECTV HD Receiver to an A/V receiver that accepts coaxial digital audio input.

TV OUT

Using an RF coaxial cable, this jack provides a basic connection between your DIRECTV HD Receiver and your TV or VCR.

CH 3/4 switch

This switch sets the channel for viewing the TV Out signal on your TV.

DVI, RGB / Y Pb Pr switch

This switch determines the signal type output by either DVI/HDCP OUT and RGB OUT, or COMPONENT OUT jacks.

RESOLUTION SELECT switch

This switch allows you to set the video resolution output by the DIRECTV HD Receiver to match the resolution of your TV or monitor (1080i, 720p, 480p/i). Affects the signal output from the COMPONENT OUT, RGB OUT, and DVI/HDCP OUT jacks.

TEL LINE

A telephone line connected to this jack allows you to order pay per view programming.

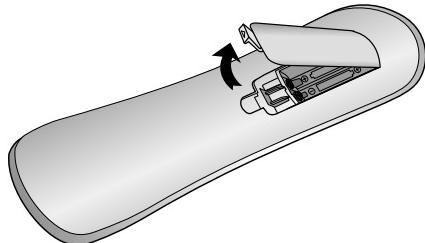
VCR CONTROL

The VCR control cable connects to this jack.

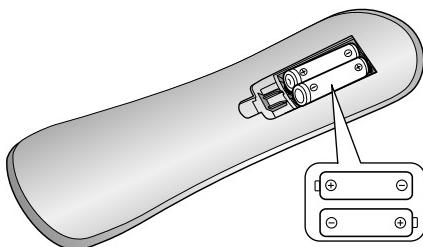
Installing the batteries in the remote control

You've unpacked the receiver and reviewed its front and back panels. Now it's time to start setting up. The first step is to install the batteries in your remote control.

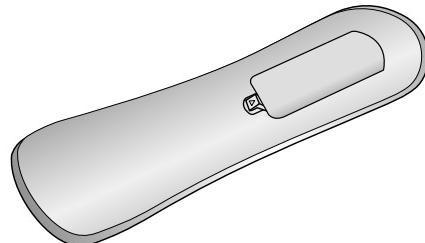
- 1 Unlatch the battery compartment cover on the back of remote control.



- 2 Insert 2 AAA batteries as shown, making sure the + and – ends of each battery line up with the corresponding marks in the battery compartment.



- 3 Snap the cover back onto the remote control.



- 4 Test the remote control to make sure the batteries have been inserted correctly. Press the DIRECTV button and make sure the button lights up. If it does not light up, check the orientation of the batteries.

Note: Alkaline batteries are strongly recommended for this remote control.

Inserting the Access Card

The next step is to insert your Access Card into your receiver. (You will not be able to view DIRECTV® programming unless the Access Card is properly inserted into the DIRECTV® High-Definition Receiver.) For some receivers, the card may already be inserted when you unpack the box.

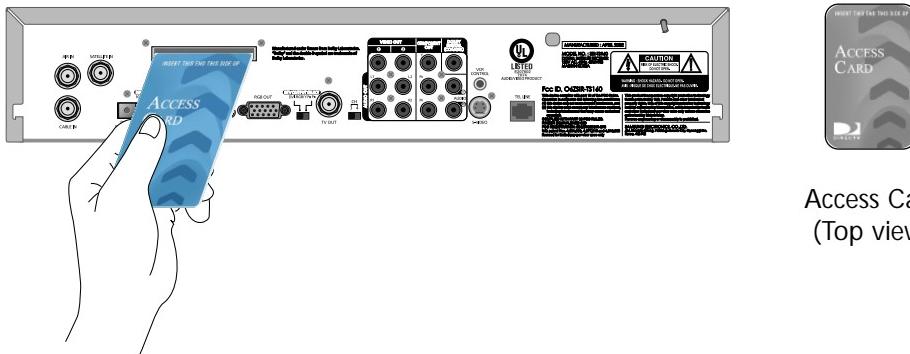
- 1 Locate the ACCESS CARD slot.

The slot is located on the back of the DIRECTV HD Receiver.

- 2 Insert the Access Card.

Make sure the side with the bar code is facing down, and the arrow is pointing away from you.

The Access Card should only be removed when replacing the card with a new one provided by DIRECTV or your program provider.



Access Card
(Top view)

Chapter 3: Setting up and connecting

This chapter explains how to setup and start using your DIRECTV® High-Definition Receiver. Contents include:

- Before making connections
- Jacks and cables
- Connecting your DIRECTV HD Receiver
- Connecting the VCR control cable
- Turning on the DIRECTV HD Receiver for the first time
- Adjusting the satellite dish
- Testing your DIRECTV HD Receiver
- Setting up local networks
- Programming local channels
- Activating your DIRECTV account
- Upgrades

Before making connections

The next step is to make the necessary connections. Before you begin, please note the following important safety and setup tips.

Protect your components from power surges

- Always turn off and unplug your DIRECTV HD Receiver, TV, and any other components before connecting or disconnecting any of the cables.

Position all cables correctly to avoid audio hum or interference

- After connecting the components, please run the audio/video cables along the side of the TV set, rather than straight down the back of the TV.
- Make sure that all cables are plugged or screwed tightly into their jacks.
- Please make sure that all antennas and cables are properly grounded.
- Whenever possible, route audio and video cables away from power cords.

Protect your components from overheating

- Do not block ventilation holes in the top of the DIRECTV® High-Definition Receiver, or any other components. Make sure to position the components so that air can circulate freely.
- If you are positioning the components in a stand or rack, make sure to allow for proper ventilation.
- Do not stack components.
- If you have a stereo amplifier or receiver as a system component, please place it on the top shelf or top rack so that hot air rising from it will not flow around other components.

Make strong connections

- Make sure you securely connect cables when making connections. When a tight fit makes a secure connection difficult, you can sometimes make it easier by gently twisting the cable-end while pushing it onto the jack. (Important: never twist S-Video or Optical Digital Audio cables — they have specially shaped ends that must be correctly oriented before connecting.)

Avoid cable damage

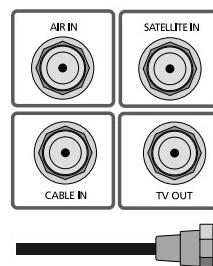
- Never kink, bend, or twist optical digital audio cables; doing so might break the fragile optical fibers they contain, rendering them unable to carry a signal.

Jacks and cables

The illustrations in this section show the various types of jacks and cables used to connect your DIRECTV HD Receiver.

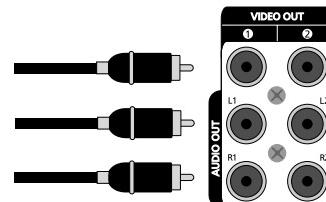
RF jacks and coaxial cable

The TV OUT RF jack on the DIRECTV HD Receiver uses a coaxial cable to connect to your TV or VCR. This jack provides monaural sound and a good TV picture. An RF jack is also used for standard analog (NTSC) and digital (ATSC) TV antenna connection (AIR IN), for a cable TV service connection (CABLE IN), and using an RG-6 coaxial cable, for the satellite dish (SATELLITE IN) input connection.



Audio/Video out jacks and cables (RCA-type)

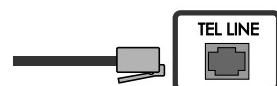
Audio/Video jacks and cables provide stereo sound and a better TV picture than RF jacks and cables. Use these jacks and cables to connect your receiver to a TV, VCR, or to other components such as a stereo receiver or amplifier. The Video out jacks provide a basic quality composite video signal using RCA-type cables. (Maximum resolution via this jack is 480i.)



Audio jacks can be used to connect the DIRECTV® High-Definition Receiver to an A/V receiver. The audio/video jacks on the back of the receiver and the audio/video cable connectors are color coded (yellow for video, red for right audio, and white for left audio).

Telephone jack and cord

The TEL LINE jack and the included telephone cord connect your DIRECTV HD Receiver to a phone line.

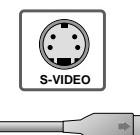


If your home does not have RJ-11 type phone jacks, please contact your phone company to get one installed.

A continuous land-based phone line connection is required for DIRECTV® Pay Per View functionality and DIRECTV SPORTS® subscriptions. Any calls generated by the DIRECTV HD Receiver are toll-free. These calls are typically made in the middle of the night; your phone is in use for approximately 30 seconds.

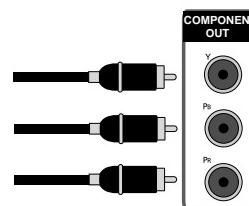
S-Video jack and cable

S-Video cables and jacks are used to connect to TVs, VCRs, and other video devices equipped with S-Video input jacks. S-Video connections provide a high-quality TV picture (better than RCA-type A/V jacks and cables). S-Video connectors must be correctly aligned before you can plug in the cable. Maximum resolution via this jack is 480i. (This cable carries the video signal only; use with audio cables for the audio signal.)



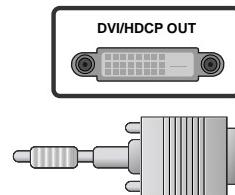
Component video jacks and cables (cable not included)

Component video cables and jacks ("Y, Pb, Pr") are used to connect the DIRECTV HD Receiver to TVs, VCRs, and A/V receivers equipped with component video input jacks. Component video connections provide a TV picture superior to S-Video connections. Component video jacks use 3 RCA-type cables to carry the signal. This connection is capable of displaying Digital TV and HDTV video resolutions. (These cables carry video only; use with audio cables for the audio signal.)



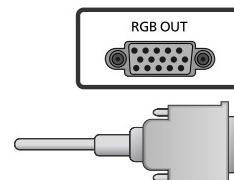
DVI jack and cable

Using the DVI jack and a digital DVI cable, your DIRECTV® High-Definition Receiver can provide the unconverted digital signal from digital off-air, cable, or DIRECTV® programming directly to A/V devices that are capable of decoding the digital video information. The DVI jack uses HDCP content protection to allow you to view HD programming that has been encoded using the HDCP protection system. For the best access to HD programming at the highest available resolution, connect this to a HDTV that supports HDCP technology. (This cable carries video only; use with audio cables for the audio signal.)



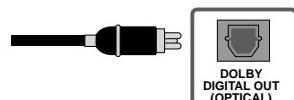
RGB OUT jack and cable (cable not included)

Uses a computer-standard 15-pin VGA video connection. Each main video color, Red, Green, and Blue uses a separate pin; and other pins are used to carry vertical and horizontal syncing signals. Using the RGB OUT jack and an RGB cable, you can connect your DIRECTV HD Receiver to devices equipped with RGB input jacks (computer monitors, for example). The RGB Out jack can carry any of the Digital TV and HDTV video resolutions. (This cable carries video only; use with audio cables for the audio signal.)



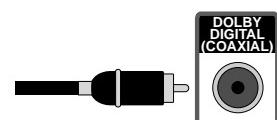
Optical digital audio jack and cable (cable not included)

Optical digital jacks and cables use light to send digital audio data to A/V receivers equipped to receive and interpret this data. The jacks and cables must be aligned before you plug in the cable. These jacks and cables may also be covered by protective caps which you must remove before making connections.



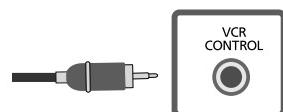
Coaxial digital audio jack and cable

Coaxial digital audio jacks and cables send digital audio data to A/V receivers equipped with coaxial digital audio input jacks.



VCR control jack and cable

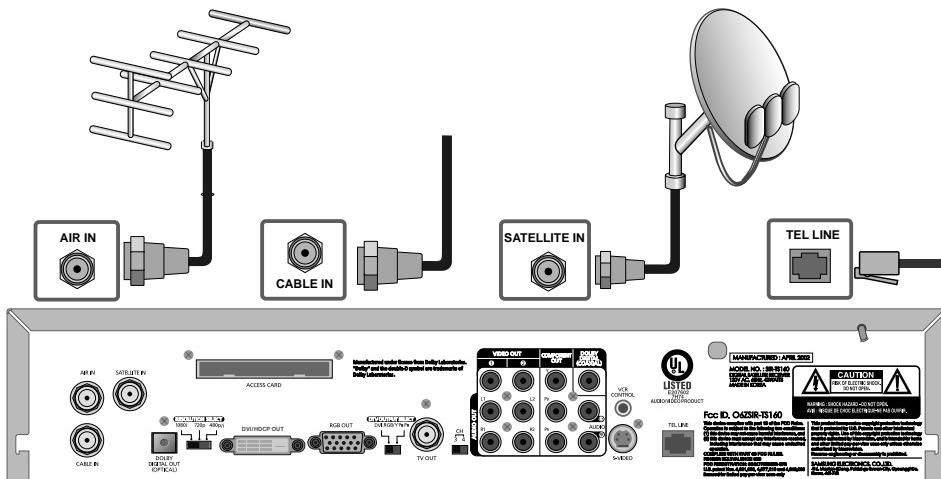
The VCR control jack and cable allow your DIRECTV HD Receiver to send signals to your VCR's remote sensor, giving you the ability to program your VCR to tape programs for you using simple on-screen controls.



Connecting your DIRECTV® High-Definition Receiver

- 1 Make sure your TV, A/V receiver, and DIRECTV HD Receiver are turned off and unplugged.
- 2 If you plan to use the DIRECTV HD Receiver to watch DIRECTV® programming, connect the RG-6 coaxial cable running from your satellite dish to the SATELLITE IN jack on the back of your DIRECTV HD Receiver.
- 3 If you plan to watch cable TV programming, connect the coaxial cable running from your cable TV system to the CABLE IN jack on the back of the DIRECTV HD Receiver.
- 4 If you plan to watch off-air TV programming (analog or digital), connect the coaxial cable running from your off-air TV antenna to the AIR IN jack on the back of the DIRECTV HD Receiver.
- 5 Connect the supplied phone cord to a telephone wall jack and to the TEL LINE jack on the back of the DIRECTV HD Receiver.

Note: A triple LNB multi-satellite dish antenna including a Sat C LNB is required to receive High-Definition programming from DIRECTV.



- 6 Make video connections to your TV.

Your DIRECTV HD Receiver supports the following kinds of video connections:

- DVI
- RGB
- component (Y, Pb, Pr)
- S-Video
- composite (standard A/V jacks)
- RF

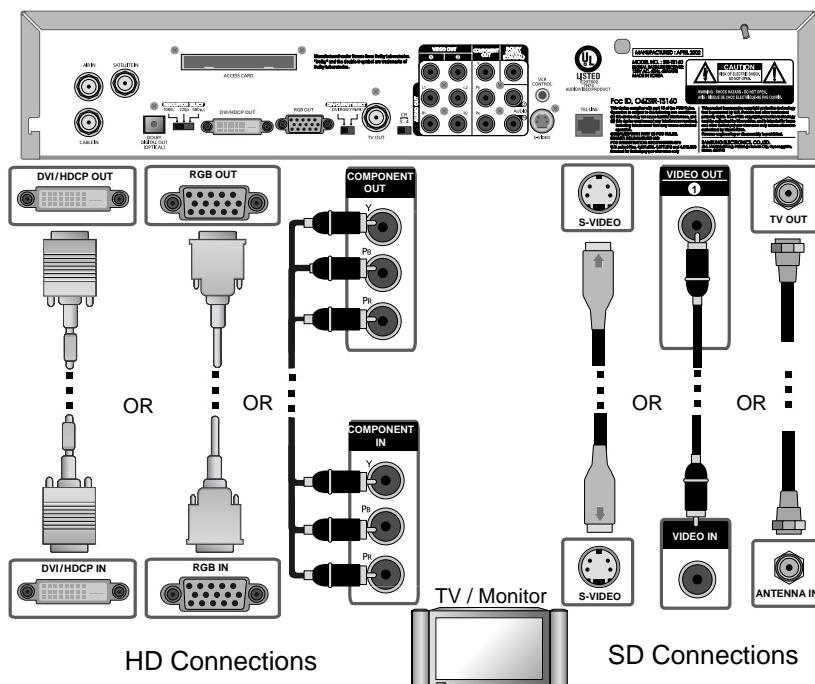
Choose the highest quality connection that your TV supports. (See Chapter 1 and page 19 for information on video connectors. See your TV owner's manual for information on your TV's capabilities.) The RGB, Component, and DVI jacks can carry any of the Digital TV and HDTV video resolutions. S-Video provides the next best video quality, followed by the standard A/V video outputs. The TV OUT RF jack provides a basic connection that carries both audio and video signals to your TV.

Since the RGB, Component, and DVI jacks do not output the 480i video format, do not connect a standard definition TV capable of displaying only 480i to the RGB, Component or DVI jacks.

Due to copyright restrictions, you may not be able to view some high definition programs in high definition format using this product. Whenever possible you should connect both HD (RGB, Component, DVI) and SD (S-Video, A/V, RF) interfaces to permit SD viewing of programs if HD viewing is restricted.

For the best access to high-definition programming at the highest available resolution broadcast by DIRECTV, connect the DVI/HDCP output to the corresponding DVI/HDCP input that supports High-bandwidth Digital Content Protection (HDCP) technology on a High-Definition Television (HDTV) or HDTV Monitor. Please check your HDTV or HDTV Monitor user manual or contact the television manufacturer to find out if your HDTV or HDTV Monitor supports HDCP.

Whichever connection you choose, connect one end of the video cable(s) to the appropriate OUT jack(s) on the back of the DIRECTV® High-Definition Receiver. Connect the other end of the video cable(s) to the video input(s) on your TV.



7 Make audio connections to your TV or A/V receiver.

Your DIRECTV® High-Definition Receiver supports the following kinds of audio connections:

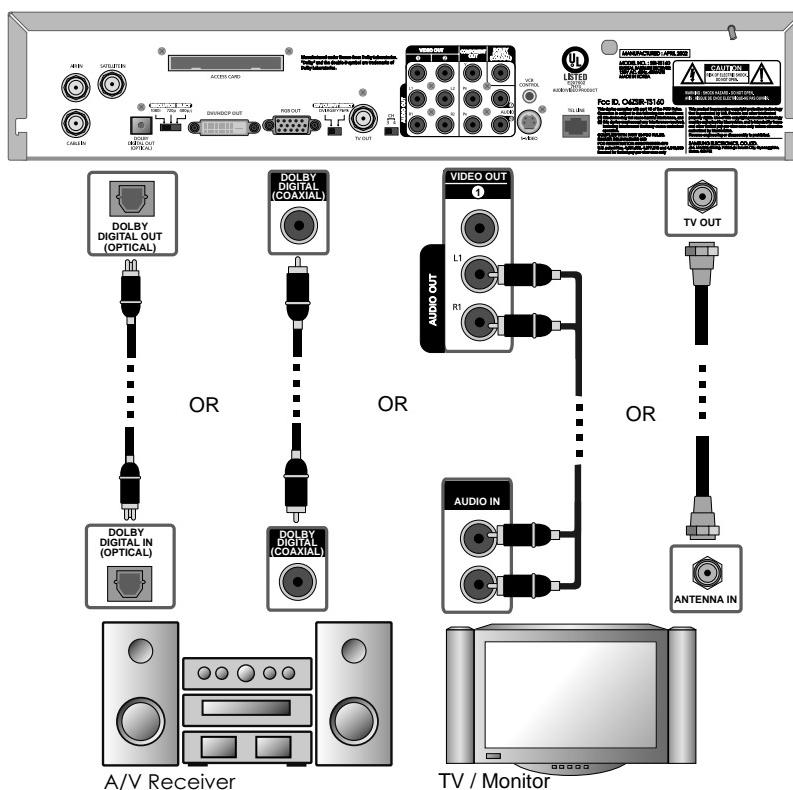
- optical digital
- coaxial digital
- standard A/V audio jacks
- RF

Choose the highest quality connection that your TV (or A/V receiver, if you are using one) supports (see your TV or A/V receiver owner's manual for information). The optical and coaxial digital audio outputs provide the highest quality audio (see Dolby Digital 5.1 in Chapter 1). The standard A/V audio jacks provide the next best audio quality. The TV OUT RF jack provides a basic connection that carries both audio and video signals to your TV.

Whichever connection you choose, connect one end of the audio cable(s) to the appropriate OUT jack(s) on the back of the DIRECTV HD Receiver. Connect the other end of the audio cable(s) to the audio input(s) on your TV.

Note: If you use the OPTICAL DIGITAL AUDIO OUT jack, remove the protective plug from the jack before making connections.

RGB, Component, DVI and S-Video jacks do not output audio.



8 (Optional) connect your VCR.

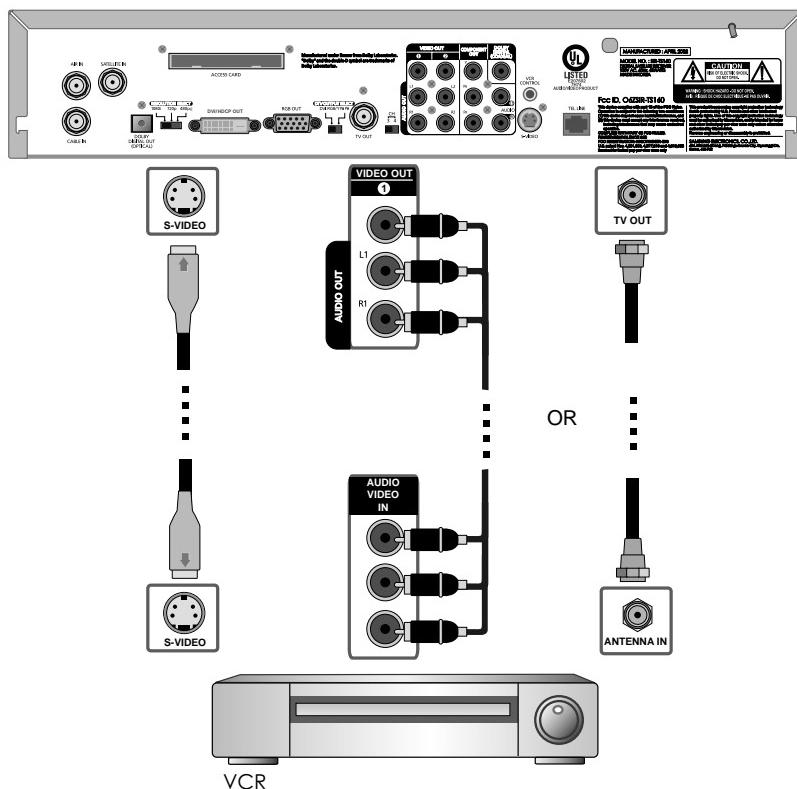
To connect your VCR to your DIRECTV® High-Definition Receiver, you can use

- S-Video jack for video with the A/V audio jack for audio, or
- A/V jacks for both audio and video, or
- TV OUT RF jack

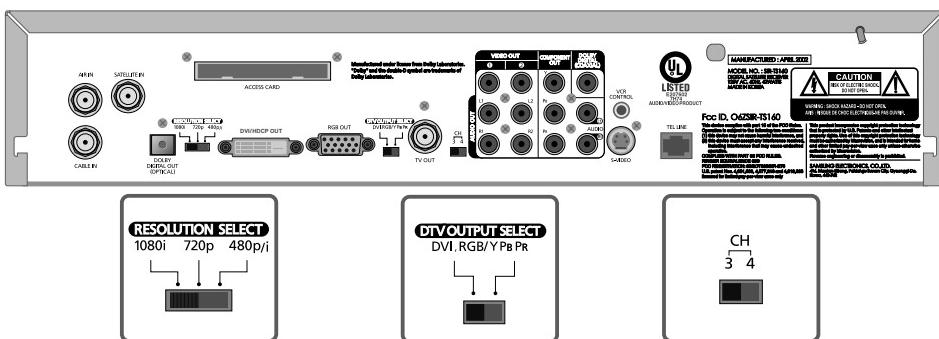
Choose the best quality connection that is supported by your VCR (and that you did not already use to connect your TV). The S-Video jack provides the highest quality video for your VCR connection. The A/V jacks provide the next best video quality and high quality audio for your VCR. The TV OUT RF jack provides a basic connection that carries both audio and video signals to your VCR.

Whichever connection you choose, connect one end of the audio and video cables to the appropriate OUT jack(s) on your DIRECTV HD Receiver. Connect the other end of the audio and video cable(s) to the audio and video inputs on your VCR.

Finally, connect your VCR to your TV by connecting audio and video output jacks on your VCR to available audio and video input jacks on your TV.



- 9 Set the RESOLUTION switch to the highest resolution supported by your TV. (See Chapter 1 for information on resolutions. See your TV owner's manual for information on your TV's capabilities.) If you connect your TV to one of the composite video out jacks (Video Out, S-Video Out, or TV Out), and you view a high-definition program with the DIRECTV® High-Definition Receiver's RESOLUTION switch set to either 720p or 1080i, the picture will be slightly cropped at the top and bottom (the very top and bottom edges of the image will not appear on the TV screen). To avoid this problem, set the RESOLUTION switch to the 480p/i position if your TV is connected to one of the composite video outputs.
- 10 If you connected your TV using RGB or DVI/HDCP output, set the switch to the left (DVI, RGB). If you connected your TV using the Component output, set the switch to the right (YPbPr).
- 11 If you connected your TV or VCR to the TV OUT RF jack, set the CH3/4 switch to determine the channel used to view DIRECTV® programming. The position of the CH 3/4 switch on your DIRECTV HD Receiver should match the setting of the similar CH 3/4 switch on your VCR.
- 12 (Optional) follow the instructions on the next page if you have a VCR and want to hook up the VCR control.
- 13 Plug in the power cords for your TV, A/V receiver, and DIRECTV HD Receiver.



Setting your TV input switch

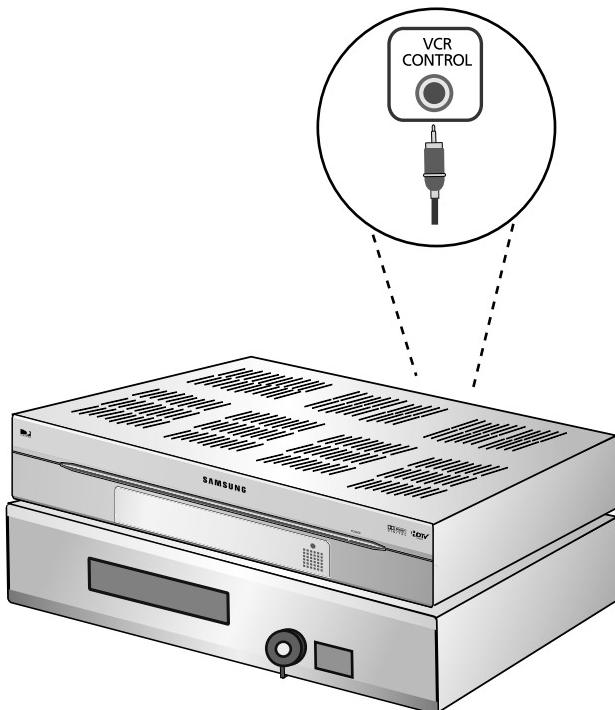
To view any of the programming from your DIRECTV HD Receiver (satellite, cable, or off-air), set your TV to display the input from the video input jack you used to connect the DIRECTV HD Receiver. (This is a setting on your TV usually controlled by a Video, Input, or Mode button. See your TV manual for help.) Also, if necessary, set your A/V receiver to play the audio from the audio input jack you used to make the audio connection. See your A/V receiver manual for help.

Connecting the VCR control cable

The VCR control cable allows your DIRECTV® High-Definition Receiver to automatically program your VCR to record a TV program. By selecting a *Record* option from the on-screen Program Guide, you can direct the VCR control cable to flash signals to the VCR's remote control sensor programming the VCR to tape a TV program for you.

To connect the VCR control cable to your DIRECTV HD Receiver, follow these steps:

- 1 Plug the VCR control cable into the VCR CONTROL jack on the back of the DIRECTV HD Receiver.
- 2 Remove the backing tape from the adhesive on the other end of the VCR control cable. Stick the VCR control next to the remote control sensor on your VCR. (See the manual for your VCR if you are not sure where its remote sensor is located.)



Note: Before you can use the VCR control cable to program your VCR, you must set up the VCR control. See *Setting up the VCR control* in Chapter 5 for details.

Turning on the DIRECTV® High-Definition Receiver for the first time

You have completed the connection steps and are ready to start using your DIRECTV HD Receiver. The first step is to turn on the DIRECTV HD Receiver.

- 1 Turn on your TV and set it to display the signal from your DIRECTV HD Receiver.

If you connected the DIRECTV HD Receiver to an RF-type input jack, you will need to tune your TV to channel 3 or 4 (depending on how the CH 3/4 switch on the back of the DIRECTV HD Receiver is set). If you have a VCR, the VCR must be in TV mode or turned off.

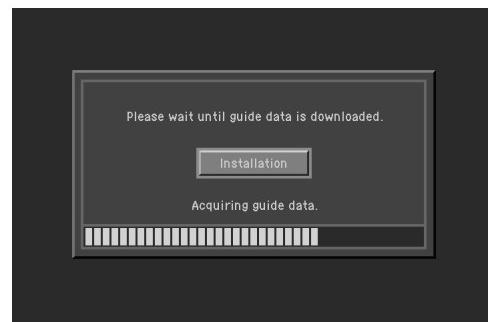
If you connected the DIRECTV HD Receiver to video input jacks on your TV, you will need to set your TV to display the input from these jacks. Usually this is done by pressing a Video, Input, or Mode button on your TV's remote control. (See the manual for your TV if you need help.)

- 2 Press the POWER button on the DIRECTV HD Receiver's remote control or on the front of the DIRECTV HD Receiver.

The light on the front panel will turn on.

If this is the first time you have turned on your DIRECTV HD Receiver, it will take a few moments to acquire the program guide from the satellite. During this process, the Progress screen appears.

When the program guide has been fully acquired, the Progress screen clears and the TV screen is displayed. You are ready to continue setting up your DIRECTV System®.



Adjusting the satellite dish

If your DIRECTV HD Receiver is able to acquire the program guide and display TV programs, your satellite dish is setup and working. You can skip ahead to the section on *Setting the dish type*.

If your DIRECTV HD Receiver cannot acquire the program guide, and you intend to watch DIRECTV® programming, you may need to adjust the way your satellite dish is installed. To do this, first make sure your TV and DIRECTV HD Receiver are turned on and connected to each other properly. Then follow the instructions below to use your DIRECTV HD Receiver's Menu system to set up your satellite dish.

The *Installation* option in the *SETUP* menu provides access to a variety of important setup controls. The first of these is the *Set Dish* menu. The *Set Dish* menu allows you to:

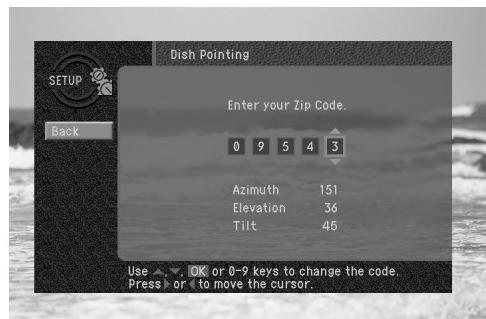
- Acquire the exact azimuth, elevation, and tilt angles to help you point your dish accurately based on your ZIP code.
- Check the setup of your satellite dish using an on-screen signal meter.
- Set the dish type (to tell your DIRECTV® High-Definition Receiver what kind of satellite dish you are using).
- Set your dish type automatically.

The sections that follow detail each of these procedures.

Acquiring the correct dish pointing angles

The *Dish Pointing* menu item in the *Set Dish* menu allows you to find out exactly how to point your satellite dish by entering your ZIP code. If you have not yet successfully aligned your satellite dish, or if you need to realign it, follow these instructions to find the exact angles you should use to point your dish:

- 1 Press the MENU button on your remote control.
The Main menu appears.
- 2 Highlight the *SETUP* menu item, then press the OK button.
The *SETUP* menu appears.
- 3 Highlight the *Installation* menu item, then press the OK button.
The *Installation* menu appears.
- 4 Highlight the *Set Dish* menu item, then press the OK button.
The *Set Dish* menu appears.
- 5 Highlight the *Dish Pointing* menu item, then press the OK button.
The *Dish Pointing* screen appears.
- 6 Use the right-arrow button on your remote control to highlight the space for the first digit in the ZIP code.



- 7 Use the 0 - 9 buttons on your remote control to enter your five-digit ZIP code. When you have entered all five digits, the screen updates to display the correct azimuth, elevation, and (for oval dish types only) tilt.
Azimuth refers to the left-to-right angle to which you should point your dish.
Elevation refers to the up-and-down angle to which you should point your dish.
Tilt (for oval dishes only) refers to the amount off-horizontal you should twist the dish on its axis.
Write down these numbers and use them to accurately point your satellite dish.
- 8 To return to the *Set Dish* menu, press the BACK button on your remote control. To exit the Menu system, press the EXIT button on your remote control.

Checking the satellite signal strength

The *Signal Meter* allows you to check the strength of the signal from the satellite to your satellite dish. This is useful while setting up your satellite dish, and while troubleshooting any reception problems you may encounter. Satellite signal strength can be affected by how accurately you have pointed the satellite dish, and by any obstructions between the satellite and the satellite dish (tree limbs, for example).

(Note: If you connected your DIRECTV® High-Definition Receiver to an off-air antenna, you can check the strength of any digital signals received by that antenna using the Digital Off-Air Signal Strength meter. Follow the instructions in *Programming local channels* later in this chapter.)

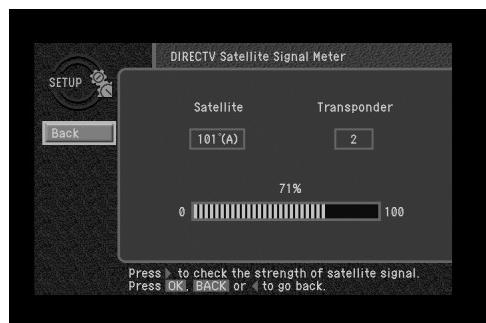
To check your satellite signal strength, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Installation* menu item, then press the OK button.
- 4 Highlight the *Set Dish* menu item, then press the OK button.
- 5 Highlight the *Signal Meter* menu item, then press the OK button.

The *Signal Meter* screen appears.

The signal meter starts checking the satellite signal strength immediately. The signal strength (from 0-to-100%) is indicated at the bottom of the screen.

The *Signal Meter* screen allows you to check signal strengths from different *Satellites*, and different *Transponders*. The *Satellites* option applies only to oval-shaped satellite dishes which receive signals from multiple satellites. On round dishes, the *Satellite* setting is fixed.



Transponders are the equipment on satellites that receive the signal from the earth-based program providers and relay it back to earth to your satellite dish. Different transponders handle the signals for different TV channels.

When setting up your satellite dish, you should try to maximize the signal strength across all of the satellites and transponders.

- 6 To check the signal strength for different satellites (oval dishes only), or different transponders, use the left- and right-arrow buttons on your remote control to highlight the on-screen *Satellite* or *Transponder* option, then use the up- and down-arrow buttons to change the setting.

The signal meter updates to show you the signal strength for the new satellite or transponder.

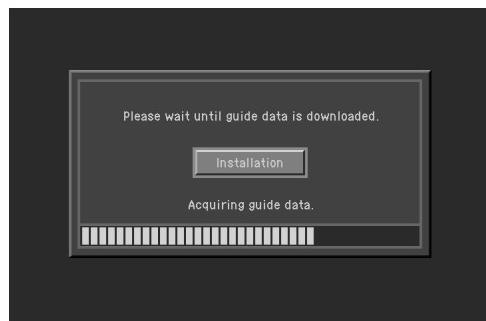
Setting the dish type

To function properly, your DIRECTV® High-Definition Receiver needs to know what type of satellite dish you are using. You can specify the dish type using the instructions here, or you can follow the steps on page 33 to use the *Auto Detection* menu item to automatically set the dish type.

Note: For DIRECTV® High-Definition programming, you will need an oval triple LNB satellite dish antenna.

To manually set the dish type:

- 1 If the Progress screen (shown here) is on your TV screen, select *Installation* by pressing the OK button.



If this screen is not displayed, access the Main Menu by pressing the MENU button on your remote control. Then use the arrow buttons on your remote control to highlight the Setup menu, and press the OK button. Then highlight the Installation menu, and press the OK button.

The Installation menu appears.

- 2 Highlight the *Set Dish* menu item, then press the OK button.

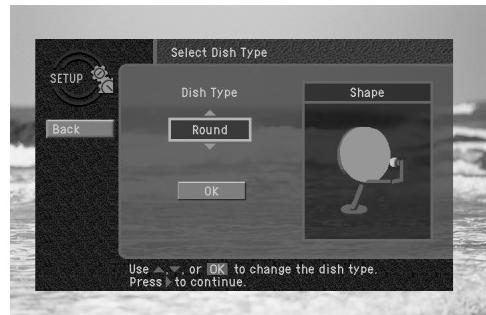
The *Set Dish* menu appears.

- 3 Highlight the *Select Dish Type* menu item, then press the OK button.

The *Select Dish Type* screen appears.

- 4 Use the right-arrow button on your remote control to highlight the *Dish Type* option on the *Select Dish Type* screen.

- 5 Use the up- and down-arrow buttons on your remote control to display the dish type you are using (*Round*, *Oval-2*, *Oval-3*, or *No Dish*).



As you display each dish type, the on-screen pictures update showing you what each of these dish types look like.

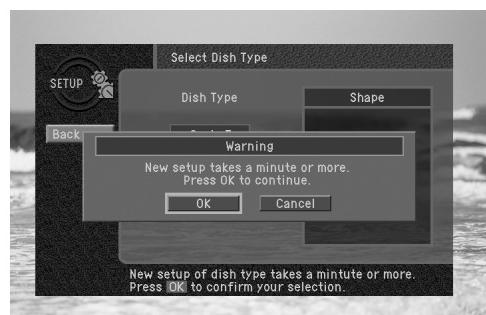
If you plan to use your DIRECTV® High-Definition Receiver for local off-air or cable TV programs, but do not plan to receive DIRECTV® programming, select *No Dish*.

- 6 When you have displayed the correct dish type, use the right-arrow button on your remote control to highlight the on-screen *OK* button, then press the OK button.

A message appears warning you that your DIRECTV HD Receiver needs to reboot (turn itself off and on) for the *Dish Type* setting to take effect.

- 7 To change the *Dish Type* to the new setting, highlight the on-screen *OK* button, then press the OK button.

To leave the *Dish Type* setting unchanged, highlight the on-screen *Cancel* button, and press the OK button.



After you select the on-screen OK button, the DIRECTV HD Receiver will reboot.

If you selected *No Dish*, the DIRECTV HD Receiver will perform an auto-scan to put your cable and off-air channels into its memory so you can tune them and see them in the on-screen Guide.

Using Auto Detection to set the dish type

To function properly, your DIRECTV® High-Definition Receiver needs to know what type of satellite dish you are using. You can specify the dish type using the instructions on page 31, or you can follow the steps below to use the *Auto Detection* menu item to automatically set the dish type.

Before you can use *Auto Detection* to set the dish-type, the dish must be correctly aligned and the DIRECTV HD Receiver must be receiving a strong signal from the satellite (that is, signal-lock must be established). To check the satellite signal, use the signal meter — see page 30 for details.

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Installation* menu item, then press the OK button.
- 4 Highlight the *Set Dish* menu item, then press the OK button.
- 5 Highlight the *Auto Detection* menu item, then press the OK button.

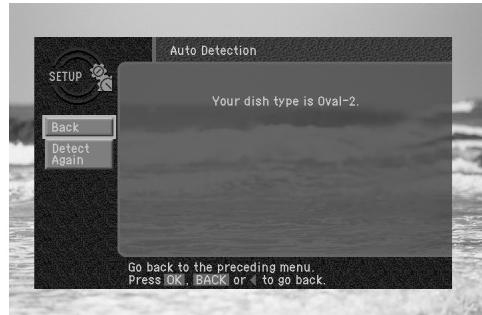
The *Auto Detection* screen appears. The DIRECTV HD Receiver starts attempting to identify the dish type. You can stop the detection process by using the arrow buttons on your remote control to highlight the on-screen *Cancel* button, then press the OK button.



Once the dish type has been identified, a screen appears telling you what type of satellite dish you have.

- 6 To accept the detected dish type setting, use the arrow buttons on your remote control to highlight the on-screen *Back* button, then press the OK button.

The DIRECTV HD Receiver will reboot.



Testing the DIRECTV® High-Definition Receiver

The *System Test* feature allows you to quickly check the status of the satellite signal, your Access Card, and your phone line connection. This is helpful in troubleshooting should you experience problems with your DIRECTV HD Receiver.

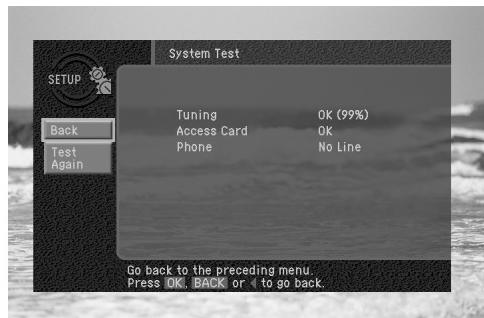
To start the System Test, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *System* menu item, then press the OK button.
- 4 Highlight the *System Test* menu item, then press the OK button.

The *System Test* screen appears.

The test will begin as soon as the screen appears. Results are displayed in a moment.

If the test discovers a problem with the satellite tuning, check that the satellite dish is pointed properly, and that nothing is obstructing the direct view to the satellite (over time trees can grow enough to block a previously open view).



If the test discovers a problem with the Access Card, check that the card is properly inserted. (See *Inserting the Access Card* in Chapter 2 for details.)

For problems with the phone line connection, be sure that the DIRECTV HD Receiver is connected to a phone line, and that the phone line is working. (Try plugging a telephone into the line you are using for the DIRECTV HD Receiver; check to see if the phone gets a dial tone. If so, the line is working.)

- 5 When you have finished the system test, you can run the test again using the on-screen *Test Again* button, exit the Menu system by pressing the EXIT button on your remote control, or use the arrow keys to highlight on-screen *Back* button, then press the OK button to return to the *System* menu.

Setting up local networks

You can use your DIRECTV® High-Definition Receiver to receive Guide information via satellite for local off-air and cable TV channels. To use this feature, you must connect your DIRECTV HD Receiver to a satellite dish as described earlier in this chapter, and you must set up the *Local Networks* option in the menu system.

(Note: If you do not connect your DIRECTV HD Receiver to a satellite dish and subscribe to DIRECTV® programming, you can still add local channels to the Guide by following the instructions in the next section.)

To set up the *Local Networks* menu option:

- 1 Press the MENU button on your remote control.
- 2 Highlight *Setup*, and press the OK button.
- 3 Highlight *Installation*, and press the OK button.
- 4 Highlight *Local Networks*, and press the OK button.
- 5 Highlight *Primary Air*, and press the OK button.
- 6 Highlight the first box in the *Zip code* area, then use the number buttons on your remote control to enter your Zip code.
After a while, a list of cities appears below your ZIP code.
- 7 Highlight the name of the city from which your local channels are broadcast, and press the OK button.
- 8 Highlight the on-screen *Back* button, and press the OK button.
You return to the *Local Networks* screen.
- 9 (Optional) If you receive off-air broadcasts from a second city, highlight *Secondary Air*, and press the OK button. Repeat steps 6 - 8 for the second city.
- 10 (Optional) If you receive programming from a cable TV service, highlight *Cable*, and press the OK button. Repeat steps 6 - 8 for the cable service.
- 11 When you have finished entering your local broadcast and cable TV information, press the EXIT button on your remote control.

The DIRECTV HD Receiver will reboot (turn itself off and then back on). After rebooting, the DIRECTV HD Receiver will acquire and provide Guide information for your local off-air and cable TV channels.

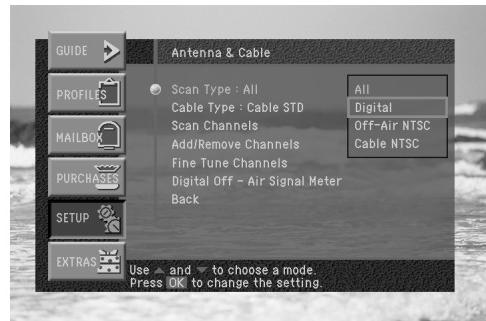
Scanning off-air and cable TV channels

The Guide can receive programming information for local and cable channels via satellite (as described in the previous section). Your DIRECTV HD Receiver can also add off-air and cable TV channels to the Guide by scanning for signals from any off-air antenna or cable TV service connections you have provided.

Follow this procedure to scan for channels from an off-air antenna and cable TV service connected to your DIRECTV® High-Definition Receiver.

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, and press the OK button.
- 3 Highlight the *Antenna & Cable* menu item, and press the OK button.
- 4 Highlight the *Scan Type* menu item and press the OK button to display the list of available channel types.

The *Scan Type* list appears allowing you to choose to set your DIRECTV HD Receiver to automatically scan for channels from *Digital* sources (off-air ATSC broadcasts), *Off-Air NTSC* sources (standard TV broadcasts), Cable NTSC (standard cable TV services), or all of these.



- 5 If this is the first time you are setting up this DIRECTV HD Receiver to receive local channels, the *All* setting is recommended.
- 6 Highlight the *Scan Type* option that matches the type of broadcasts you would like to program into your DIRECTV HD Receiver, then press the OK button.
- 7 Next, set your cable TV type by highlighting the *Cable Type* menu item and pressing OK. Then highlight the type of cable signal your cable TV service provides (*STD*, *HRC*, or *IRC*), and press the OK button.
STD, *HRC* and *IRC* are signal formats used by cable TV services. Contact your Cable TV service provider to determine which signal type they use.
- 8 Highlight the *Scan Channels* menu item, and press the OK button.
The *Scan Channels* screen appears and the DIRECTV HD Receiver automatically starts looking for all available channels of the type you specified in the *Scan Type* list. Wait until the scan is complete.
- 9 If the automatic scan included any channels that you do not intend to watch, you can edit the channel list by using the *Add/Remove Channels* menu item in the *Antenna & Cable* menu.
- 10 If any of the off-air antenna channels appear out-of-tune, you can fine tune them using the *Fine Tune Channels* item in the *Antenna & Cable* menu.
- 11 If you have added digital channels from an off-air antenna, you can check the signal strength for that channel by using the *Digital Off-Air Signal Strength* menu item in the *Antenna & Cable* menu.
- 12 To exit the Menu system press the EXIT button on your remote control.

Activating your DIRECTV account

After you have installed and connected the satellite dish and DIRECTV® High-Definition Receiver, you must contact your service provider to create an account. To order programming from DIRECTV, please call 1-800-DIRECTV (1-800-347-3288).

With this Digital Satellite Receiver and the proper Satellite Dish Antenna, you may be able to receive local channels from DIRECTV in certain markets. Additional equipment may be required in some areas. Check with your retailer or visit www.DIRECTV.com for information on availability of local channels from DIRECTV in your area.

DIRECTV® programming is provided in accordance with the terms and conditions of the DIRECTV Customer Agreement, which is provided at DIRECTV.com or with your first DIRECTV bill.

Activation of programming may be subject to credit approval and requires valid service address, social security number and/or major credit card. Programming subject to change. You must be physically located in the U.S. to receive DIRECTV® service. DIRECTV services not available outside the U.S. Deposit or prepayment may be required. DIRECTV programming is sold separately and independently of DIRECTV® System hardware. A valid programming subscription is required to operate DIRECTV System hardware.

Upgrades

Your digital satellite receiver is able to receive upgrades or modifications to some of its features and functions. These modifications will occur automatically, usually at times when the receiver would likely be turned off.

If your receiver is on when an upgrade or modification is sent, you may experience a disruption in reception for a minute or two. Your reception should return to normal after the modification is complete. Your receiver must be plugged in to receive any upgrades. **Do not unplug your receiver while an upgrade is in progress.** Please consult the *System Upgrades* menu item (in the *System* section of the *Setup* menu) to find a schedule of upgrades or modifications planned by DIRECTV.

Chapter 4: Watching TV

This chapter covers all of the things you can do with the Program Guides and other features that let you control the way you watch TV. Specifically, it contains information on:

- Remote control overview
- Changing channels
- Adjusting the volume
- Getting help
- Getting information on the TV program you are watching
- Finding out what's on: the Guides
- Searching for programs in the Guide
- Choosing an alternate audio format for a program
- Changing the User setting
- Pay per view programs

Remote control overview

Here is a quick review of the buttons on your DIRECTV® High-Definition Receiver's remote control.

Before your DIRECTV HD Receiver's remote control can operate your TV, VCR, DVD player, or other device, you must first program the remote control to operate that device.

See *Chapter 8: Programming the remote control*.

POWER

Turns the device you are controlling on or off.

SET

Use this button when programming your remote control to operate your TV, VCR, DVD player, or an auxiliary device (AUX). See *Chapter 8, Programming the remote control*.

TV, VCR, DVD, AUX

These buttons tell your remote control which device to operate. For example, to start playing a DVD, you would press DVD, then press the Play button. These buttons work only after the remote control has been programmed.

DIRECTV

Makes the remote control operate your DIRECTV HD Receiver (e.g. to change channels, access the Guide, or get information about a program). Your remote control does not need to be programmed to operate your DIRECTV HD Receiver.



VOL+/-

Adjust the volume level of your TV (once the remote control has been programmed). You can control the volume when in TV, DIRECTV, or VCR mode.

MUTE

Mute or unmute the TV audio (once the remote control has been programmed).

TV/VIDEO

Switch the TV between its video input modes (once the remote control has been programmed).

CH+/-

Change channels on your DIRECTV® High-Definition Receiver or your TV (once the remote control has been programmed).

INFO

Display the Channel Banner and information about the current program.

HELP

Display instructions about the screen or menu currently displayed.

WHO

Press to change the current user profile.

QUICK

Press this button to view the Quick Guide.

MENU

Press this button to display the on-screen Menu.

GUIDE

Press to view the on-screen Program Guide.

Up/Down/Left/Right arrows

These buttons move the highlight to any on-screen Guide or Menu selection.

OK

Select highlighted items in the on-screen Menu or Guide.

BACK

Return to the channel you were last watching, or return to a previous Menu.

EXIT

Exit any Guide or Menu screen and return to the TV program you were watching.

CALLER ID (red button)

Displays the phone numbers of callers who called you on the phone line connected to your DIRECTV HD Receiver (works only if you subscribe to your telephone service's caller ID service). While in the Guide, this button lets you change the Guide style.

FREEZE (green button)

Takes a still picture of the TV screen. Press it again to resume the program you were watching. In the Guide, this button lets you see program listings for different times.

AUDIO (yellow button)

While watching TV, press this button to select an alternate audio track. While in the Guide, this button lets you view programs in selected categories.

SEARCH (blue button)

Press this button to search for a program listing in the Guide.

Number and delimiter buttons (0-9, -)

Press the number buttons to tune to a channel or to enter numbers on Menu screens. Press the delimiter button (-) to separate parts of a number.

GAME

Accesses games you can play.

FORMAT

Cycles through the formats available for your display type.



Displays and hides Closed Caption text.

VCR control buttons

Operate your VCR with the Play, Rewind, Fast-Forward, Record, Stop and Pause buttons (once the remote control has been programmed).

Changing channels

Your DIRECTV® High-Definition Receiver can tune in DIRECTV® programming, and, if you have connected an off-air antenna or cable TV cable, it can tune in your local off-air NTSC and digital broadcasts or cable TV programs.

All available channels from any of these sources will appear in the Guide, and can be tuned in using the CH +/- buttons and the 0 - 9 number buttons on your remote control.

The Channel Banners that appear on the screen as you change channels (or when you press the INFO button) indicate the signal type for the program you are watching (*Satellite*, *Analog*, or *Digital*). *Satellite* indicates the program on the current channel is being received through your satellite dish. *Analog* indicates that the program is an NTSC program from a cable company or off-air antenna. *Digital* indicates the program is a Digital TV broadcast (either HDTV or SDTV) being received from a cable TV connection or off-air antenna. (See Chapter 1 for discussions of the types of TV programming your DIRECTV HD Receiver can receive.)

To change the channel you are watching:

- 1 Press the CH + button on the remote control to tune to a higher channel number.
Press the CH - button to tune to a lower channel number.
- 2 Enter a channel number directly with the 0 - 9 number buttons.
After entering a number, press the OK button or wait a few seconds for the system to tune to the new channel.
For some broadcasts, you may need to enter a two-part number to specify a channel and a sub-channel (entering 5-1, for example, would tune you to channel 5, sub-channel 1). To enter two-part channel numbers, use the number buttons to enter the first number, then press the delimiter button (-), then enter the second number.
- 3 Use the Quick Guide or full-screen Program Guide to change channels.

Adjusting the volume

To adjust the volume while watching DIRECTV programming, you simply press the VOL + button on the remote control to increase the volume or the VOL - button to decrease the volume. In order for the DIRECTV HD Receiver's remote control to adjust your TV's volume setting, you will have to program the remote control to operate your TV. (See *Chapter 8: Programming the remote control*.)

Getting help

While using the Guide or Menu systems, you will often see a line of text at the bottom of the screen explaining what you are seeing on-screen, or telling you what your next step is. When this brief explanation is not enough, you can view more detailed Help screens by pressing the HELP button on your remote control.

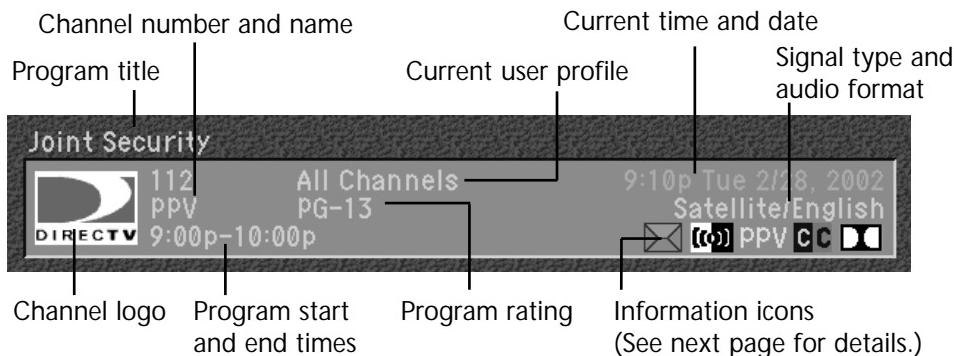
Getting information on the TV program you are watching

Your DIRECTV® High-Definition Receiver provides several layers of information about the TV programs you watch.

The Channel Banner

As you change channels you will see a Channel Banner on each channel you tune to. After a few seconds, the Channel Banner disappears. If you want to clear it right away, press the EXIT button on your remote control.

The Channel Banner provides the following information:



The Full Channel Banner

The Channel Banner provides quick information as you switch channels on your DIRECTV HD Receiver. If you want to see information about the channel you are currently watching, simply press the INFO button on your DIRECTV HD Receiver's remote control. Pressing the INFO button displays the Full Channel Banner.

The Full Channel Banner displays all the information in the Channel Banner, plus more details about the program. For example, the Full Channel Banner for a movie might display the category for the movie (drama, comedy, action/adventure, etc.), the cast, the year it was released, and a short description of the plot.

You can clear the Full Channel Banner from your screen by pressing the EXIT button on your remote control.



Information icons

In addition to the basic channel and program information contained in the Channel Banners (program title, channel name, rating, etc.), there are a set of information icons. These icons tell you more about the program you are watching and about the status of your DIRECTV® High-Definition Receiver. Here are descriptions of each icon:



Multi-language

This icon appears when additional audio tracks are available. Press the yellow AUDIO button to choose an alternate audio track.



Locked

This icon appears when the system is locked.



Unlocked

This icon appears when the system is temporarily unlocked.



Mail

This icon appears when there are unread mail messages from DIRECTV in your system mailbox.



Music channel

This icon appears when the channel is a music-only channel.



Pay per view program

This icon appears when the program is a pay per view program.



Closed caption

This icon appears when closed captioning is available for a program.



Dolby® Digital

This icon indicates that the current program is being broadcast using a Dolby Digital audio track. Because all high-definition broadcasts use Dolby Digital audio, the icon does not appear for HDTV broadcasts.



Letterbox

This icon indicates that the current program is being broadcast using the letterbox widescreen video format.



High definition

This icon indicates that the current program is a High Definition broadcast (HDTV).

The Program Detail Screen

If you want to see more information than is presented in either the Channel Banner or the Full Channel Banner, you can press the INFO button twice to display the Program Detail Screen.

The Program Detail Screen displays all of the information provided in the Channel Banner and Full Channel Banner, plus complete details about the program and a list of actions you can take related to the program.

To view the Program Detail Screen:

- 1 While watching a TV program, press the INFO button on your remote control.
The Full Channel Banner appears.

- 2 Press the INFO button again.
The Program Detail Screen appears.

Select this arrow and press the
OK button to scroll down.



Another way to view the Program Detail screen is to enter the program Guide, highlight the program listing you are interested in, then press the INFO button.

Program Detail Screen actions

In addition to a description of the program you are watching, the Program Detail Screen provides a list of actions you can take related to that program. Here are descriptions of the actions that might be available for a program. (Note: not all actions are available for every program.)

- Back:* Displays the last screen you viewed before entering the Program Detail Screen.
- Exit:* Clears the screen and displays the last channel you were viewing.
- Buy \$(Price)* For pay per view programs, allows you to purchase the program.
- Tape \$(Price):* For pay per view programs, allows you to purchase the program and tape it on your VCR (appears only when the price to tape is different from the purchase price).
- Cancel \$(Price):* For pay per view programs that you have previously purchased but that have not yet aired, lets you cancel your purchase.
- Tune:* Displays the channel airing the program described.
- Schedule:* For future programs, allows you to set your DIRECTV® High-Definition Receiver to remind you when the program is about to start, or to set your DIRECTV HD Receiver and VCR to record the program.
- Unschedule:* For programs you have previously scheduled for a reminder or recording, allows you to cancel the reminder or recording.
- Episodes:* For programs broadcast as episodes, allows you to view a list of other episodes in that program's series.
- Show Times:* Displays a list of times and channels for viewing the program.
- Similar:* Displays a list of programs that have aspects in common with the program.

Finding out what's on: the Guides

Your DIRECTV® High-Definition Receiver provides access to detailed information about TV schedules. If you want to know what's on, just use the Guide.

The Guides provide scheduling information for all types of programming (satellite, off-air, or cable TV).

There are several types of Guides you can access, each suited to a particular set of needs and preferences.

Types of Guides

When you want to find out what's on, you can use the simple, fast Quick Guide; the detailed, informative Grid Guide; or the graphics-rich Logo Guide.

The pages that follow tell you how to access and use each of these Guide types.

Quick Guide

The Quick Guide allows you to quickly scan to see what is on right now while still viewing the channel you are watching. Great for those times when you just want to quickly check out what's showing on that favorite channel.



Grid Guide

The Grid Guide is the most complete, detailed Guide type. It lets you see the programs for each channel in a scrollable schedule (sorted by channel *number*, or by channel *name*). If you don't know what you want to watch, and you want to browse a broad range of channels, the Grid Guide may be for you.



Logo Guide

The Logo Guide lets you find out what's on by browsing through the channels by highlighting the channels' logos — perfect for those of us who prefer pictures to text.



Setting the default Guide style

The *Guide* menu item allows you to set which style of Guide is displayed when you press the GUIDE button on your remote control. Here's how:

- 1 Press the MENU button on your remote control.

The Main menu appears on your screen.

When you display the Main menu, the *Guide* item is highlighted.

- 2 Press the OK button.

The Guide menu appears.

- 3 Use the up- and down-arrow buttons on your remote control to highlight the *Set Guide* menu item.

The page icon to the right of the *Set Guide* item indicates selecting this item will display a list of options.

- 4 Press the OK button on your remote control.

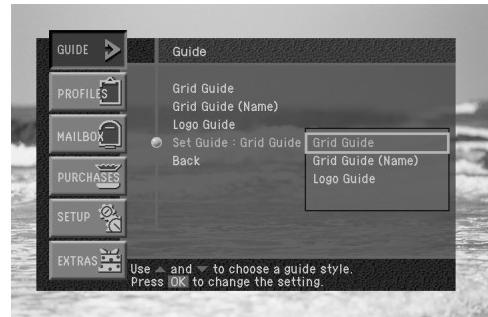
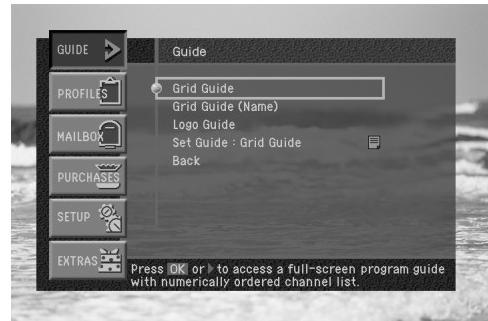
A list of Guide Styles appears.

- 5 Highlight the Guide style you wish to have displayed anytime you press the GUIDE button, then press the OK button.

The list of Guide styles disappears, and the style you chose is displayed in the *Set Guide* menu item.

- 6 To exit the Menu, press the EXIT button on your remote control.

Pressing the GUIDE button will now display the Guide style you selected.



Using the Quick Guide

The Quick Guide is made up of a Channel Banner and a channel list. This Guide is small and transparent so that you can continue to watch a TV program while you are browsing the Guide. Follow these steps to use the Quick Guide.

- 1 To display the Quick Guide, press the QUICK button on your remote control.

The Quick Guide appears, displaying a small Channel Banner and a channel list showing the current half-hour time block.

- 2 Use the arrow buttons on your remote control to move up or down in the channel list, or forward (and then backward) in time. You can move up and down through the channel list a full page at a time by pressing the CH+ and CH- buttons on your remote control. You can also use the number buttons on your remote control to move the Quick Guide directly to a specific channel.

As you highlight each program listing, its information appears in the Channel Banner.



- 3 To see more information on a highlighted program, press the INFO button on your remote control.

The Full Channel Banner appears.

- 4 To get information on a channel (rather than a program), use the arrow keys on the remote control to highlight the channel number.
- 5 To expand the program listings to show more time, press the right-arrow button on your remote control.



Each time you press the right arrow, the Quick Guide expands by 30 minutes (up to a maximum 2-hour display). To reduce the Quick Guide in 30-minute blocks, press the left-arrow button.

- 6 To watch a program you see listed in the Quick Guide, highlight that program, then press the OK button.

Using the Grid Guide

The Grid Guide displays a Channel Banner and a channel list. It provides access to the complete set of Guide features including the ability to search for programs, schedule reminders and recordings, etc.

Displaying and clearing the Grid Guide

To display or clear the Grid Guide:

- 1 To display the Grid Guide, press the GUIDE button on your remote control. The Grid Guide appears. (Pressing the GUIDE button displays the Guide style — *Grid Guide*, *Grid Guide (Name)*, or *Logo Guide* — established in the *Set Guide* option in the *Guide* menu. The default setting is *Grid Guide*).
- 2 You can also display the Grid Guide by pressing the MENU button on your remote control. Then highlight *Guide* and press the OK button. Then highlight *Grid Guide* and press the OK button again.
- 3 To clear the Grid Guide from your screen, press the EXIT button on your remote control.

Grid Guide overview

This diamond marks the current time (so you can see how close you are to a program start or end time).

Picture-in-Guide shows you the program you are watching.

Title of the highlighted program or channel

This Banner shows information about the channel or program highlighted in the Guide.

Current time and date

Signal type



The program currently highlighted.

Icons to remind you about the Guide functions of the red, green, yellow, and blue buttons on your remote control.

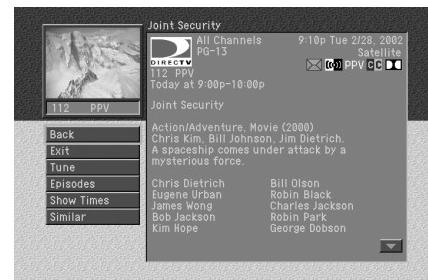
Getting around in the Grid Guide

You can use the Grid Guide to get detailed information about the channels and programs it contains. Here's how:

- 1 To highlight different program listings in the Grid Guide, use the arrow buttons on your remote control to move up or down in the channel list, or forward and backward in time.
- 2 To move up and down through the channel list a full page at a time, press the CH+ and CH- buttons on your remote control.
- 3 To move the Grid Guide directly to a specific channel, press the 0-9 number buttons on your remote control to enter the desired channel number.
- 4 As you highlight each program listing in the Grid Guide, information about the program appears in the Channel Banner. To see more information on a highlighted program, press the INFO button on your remote control.

The Program Detail screen appears, showing complete information about the highlighted program and a list of actions you might want to take related to that program.

To return to the Grid Guide, highlight the *Back* item from the on-screen list and press the OK button.



- 5 To get information on a channel (rather than a program), use the arrow keys on the remote control to highlight the channel entry in the Guide.

The Channel Banner displays information about the highlighted channel.



- 6 Press the INFO key on your remote control while a channel entry is highlighted to see a Channel Detail Screen containing more information about the highlighted channel.



Tuning to a channel with the Grid Guide

To tune to a program or channel listed in the Grid Guide:

- 1 Highlight the program or channel you want to watch.
- 2 Press the OK button.

The Guide disappears, and the channel you selected fills the screen.

Switching to another Guide style

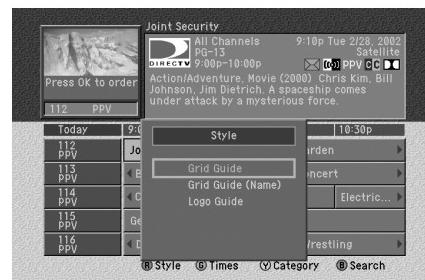
You can switch from the *Grid Guide* to the *Grid Guide (Name)* or *Logo Guide* while viewing the Grid Guide. Here's how:

- 1 With the Guide displayed on your screen, press the red R button on your remote control.

A list of Guide Styles appears on your screen.

- 2 Highlight the Guide style you wish to view, then press the OK button.

The Guide Style list disappears, and the Guide appears in the style you chose.



Viewing the Guide for a different time

You can view the TV programming for different times by using the Guide's time control bar. Here's how:

- 1 With the Guide displayed on your screen, press the green G button on your remote control.

The time control bar appears across the bottom of the Guide.

- 2 Highlight the time controls. Press the OK button to select the controls you wish to use.



Here is an explanation of each time control.



Exits the time control bar.



Moves the Guide view back 6 hours (unavailable when viewing the current time).



Moves the Guide view back 30 minutes (unavailable when viewing the current time).



Moves the Guide view ahead 30 minutes.



Moves the Guide view ahead 6 hours.

Now

Moves the Guide view to the current time.

◀Prev Day

Moves the Guide view back 24 hours (unavailable when viewing the current time).

Next Day ▶

Moves the Guide view ahead 24 hours.

Viewing a category of programs in the Guide

You can set your Guide to show you all channels, or only channels showing programs in a specific category (for example, only channels showing sports, or only channels showing movies). Here's how:

- 1 With the Guide displayed on your screen, press the yellow Y button on your remote control.
A list of Guide *Categories* appears on your screen.
- 2 Highlight the Guide category you wish to view, then press the OK button.
The Guide Category list disappears and the Guide appears, displaying channels showing programs that match the category you chose.



Using the Logo Guide

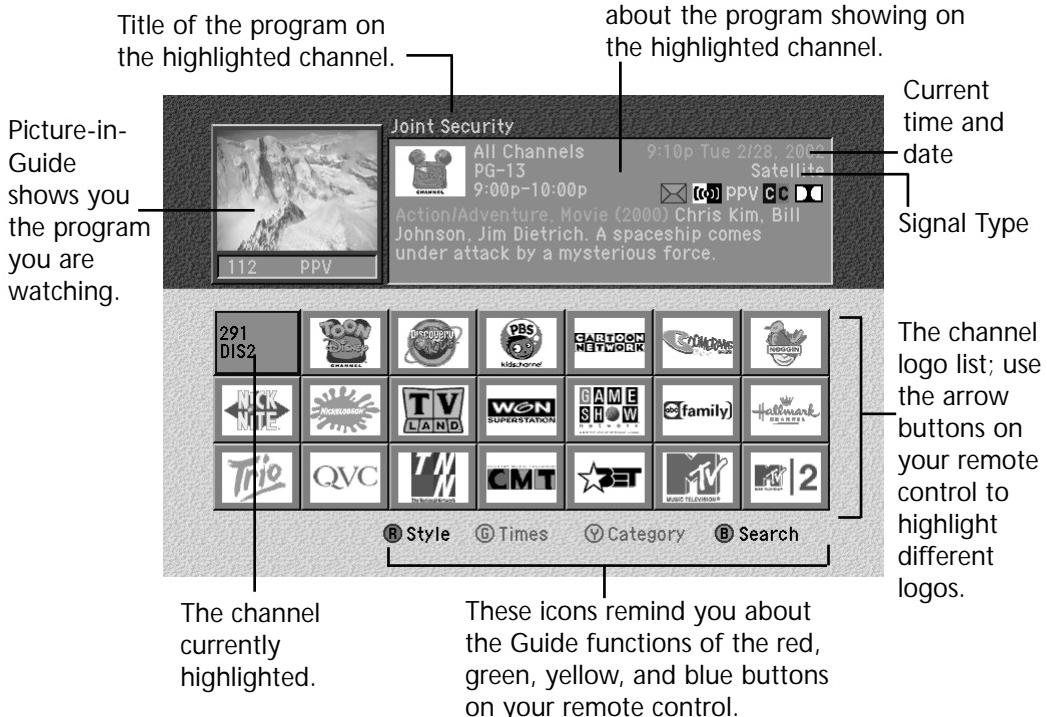
The Logo Guide displays 21 channel logos and a Channel Banner showing information about the program currently showing on the highlighted channel. Follow the steps in this section to use the Logo Guide.

Displaying and clearing the Logo Guide

To display or clear the Logo Guide:

- 1 Press the MENU button on your remote control. Then highlight the *Guide* menu item, and press the OK button. Then highlight the *Logo Guide* menu item, and press the OK button. The Logo Guide appears on your screen.
- 2 Or, press the GUIDE button on your remote control. Then press the red R button to display the list of Guide styles. Then highlight the Logo Guide option, and press the OK button. The Logo Guide appears.
- 3 Or, you can set the default Guide Style so that the Logo Guide always appears whenever you press the GUIDE button on your remote control. See *Setting the default Guide style* on page 45 for details on setting the default Guide Style.
- 4 To clear the Logo Guide from your screen, press the EXIT button on your remote control.

Logo Guide overview



Getting around in the Logo Guide

You can use the Logo Guide to get information about the programs currently showing on your DIRECTV® High-Definition Receiver. Here's how:

- 1 To highlight different program listings in the Logo Guide, use the arrow buttons on your remote control to move up, down, left, or right in the logo list. When you highlight a logo, it is replaced by the channel name and number in the Logo Guide.
- 2 To move up and down through the channel logos a full page at a time, press the CH+ and CH- buttons on your remote control.
- 3 To move the Logo Guide directly to a specific channel, press the 0-9 number buttons on your remote control to enter the desired channel number.
- 4 As you highlight each channel logo in the Logo Guide, information about the program currently showing on the highlighted channel appears in the Channel Banner. To see more information on a highlighted program, press the INFO button on your remote control.



The Program Detail Screen appears, showing complete information about the program on the highlighted channel, and a list of actions you might want to take related to that program. To return to the Logo Guide, highlight the *Back* item from the on-screen list and press the OK button.



Tuning to a channel with the Logo Guide

To tune to a program or channel listed in the Logo Guide:

- 1 Highlight the channel you want to watch.
- 2 Press the OK button.

The Logo Guide disappears, and the channel you selected fills the screen.

Switching to another Guide style

You can switch from the *Logo Guide* to the *Grid Guide* or *Grid Guide (Name)* while viewing the Guide. Here's how:

- 1 With the Guide displayed on your screen, press the red R button on your remote control.
A list of *Guide Styles* appears.
- 2 Highlight the Guide style you wish to view, then press the OK button.
The Guide Style list disappears, and the Guide appears in the style you chose.



Searching for programs in the Guide

You can search the entire list of programs stored in your DIRECTV® High-Definition Receiver's program guide to find exactly the program you wish to see. There are four ways to search the Guide:

- By Credits:* Lets you find programs that match the actor, director, role, award, or year you type using an on-screen keyboard.
- By Title:* Lets you find programs that match the program title you type using an on-screen keyboard.
- By Text:* Lets you find programs for which either the credits or the title match the search term you type using an on-screen keyboard.
- By Category:* Lets you find programs that match the program categories and sub-categories you select from an on-screen list.

These search techniques are described in the sections that follow.

Searching by Credits, Title, or Text

To find programs that star a certain actor, share a director, have a particular character, have won a specific award, or were created in a certain year, search *By Credits*. To search for a program whose title you know, search by title.

Searching by text looks at both credits and titles to find programs that match your search terms.

- 1 While viewing the Guide, press the blue B button on your remote control.

A search list appears, allowing you to choose a type of search.



- 2 Highlight *By Credits*, *By Title*, or *By Text*, then press the OK button.
The search screen you selected appears.
If you chose to search By Credits, the screen allows you to select a type of credit to search by. Highlight one of the five Credit types (Actor, Director, Role, Award, or Year), and press the OK button.
- 3 Highlight the first letter in the word you wish to search for, then press the OK button.
To erase a letter, highlight the on-screen left arrow and press the OK button.
To clear the entire entry, highlight the on-screen *Clear* button and press the OK button.
- 4 Continue to select letters from the on-screen keyboard until you have completed your search term.
As you enter letters, an on-screen list shows you matches for the text you have entered so far.
- 5 To execute the search you can either highlight the on-screen *Search* button and press the OK button, or you can highlight an item from the on-screen list and press the OK button.
A list of programs related to your search terms appears.
- 6 To see a list of show times for one of the search results, highlight that program, then press the OK button.
- 7 To see information about one of the search results, highlight that program, then press the INFO button.

Searching by Category

When you search by category, you narrow down the list of programs by choosing from program categories and sub-categories.

- 1 While viewing the Guide, press the blue B button on your remote control.
A search list appears, allowing you to choose a type of search.
- 2 Highlight *By Category*, then press the OK button.



The *Search By Category* screen appears.

Categories that contain sub-categories have a page icon to the right of the category name.

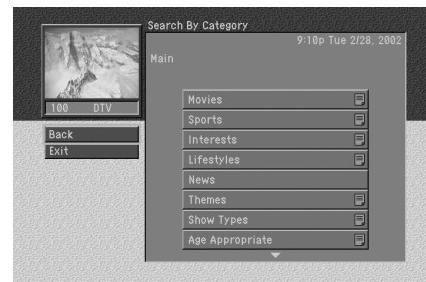
- 3 Highlight a category, then press the OK button.

If you select a category that contains sub-categories, the subcategory list appears. Continue to narrow your search by selecting from the sub-category list until there are no more sub-categories.

If you select a category that contains no sub-categories, the search results appear displaying the programs in the category you selected.

To return to a previous category list, highlight the on-screen *Back* button and press the OK button.

- 4 To see a list of show times for one of the search results, highlight that program, then press the OK button.
- 5 To see information about one of the search results, highlight that program, then press the INFO button.



Choosing an alternate audio format for a program

Many programs on your DIRECTV® High-Definition Receiver offer several audio formats. For example, some programs are available in alternative languages. Some are available in Dolby Digital format (a high-quality digital audio format).

You can tell if a program offers alternative audio formats by pressing the INFO button on your remote control while watching a program. If one of these icons appears in the Channel Banner, an alternative audio format is available:

 This icon indicates that one or more alternative languages are available for the program.

 This icon indicates that a Dolby Digital version of the audio for the program is available.

To change the audio format for a program you are watching, follow these steps:

- 1 While viewing a program, press the AUDIO button on your remote control.
A list of available audio formats for the program you are watching appears.
- 2 Highlight the audio format you wish to hear for the program, then press the OK button.
The list of audio formats disappears and the program audio is now played in the format you selected.



Changing the User setting

Your DIRECTV® High-Definition Receiver allows you to establish groups of preferences for your family, and for up to four individuals. For each of these users, you can specify the user name, a unique channel list, and the color and translucency of the on-screen Guides and Menus. (Detailed instructions for modifying these user-settings are in Chapter 6.)

To set your DIRECTV HD Receiver to operate using the settings specified for one of the users, follow these steps:

- 1 While viewing a program, press the WHO button on your remote control.
The Who list appears.
- 2 Highlight the name of the user whose settings you wish to activate, then press the OK button.
The Who list disappears, and the selected user's settings take effect.
To clear the Who list without changing the current user, press the WHO or EXIT button on your remote control.



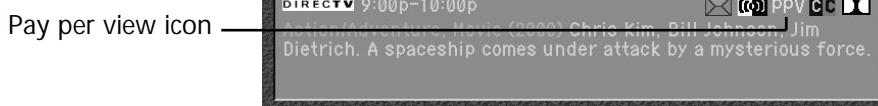
Pay per view programs

Your DIRECTV HD Receiver gives you access to many pay per view movies, sporting events, concerts, etc. All you need to order these events is your DIRECTV account, a land-based telephone line connected to your DIRECTV HD Receiver, and your remote control.

Identifying pay per view programs

There are several ways to identify pay per view programs.

- 1 If you tune to a channel currently showing a pay per view program which you have not yet purchased, a message appears telling you how to order the program.
- 2 If you press the INFO button on your remote control to view information about a program in the Guide or about a program you are currently tuned to, you will see the pay per view icon in the Channel Banner for that program.



Ordering pay per view programs

To order a pay per view program:

- 1 Locate and highlight the program you wish to purchase in the Guide. You can purchase current programs (as long as the program is less than half over) or future programs.
- 2 Press the INFO button on your remote control. The Program Details screen appears, with the list of available actions for that program.
- 3 Use the arrow keys on your remote control to highlight the *Buy* item from the list, then press the OK button.
A confirmation screen appears in which you can confirm or cancel your purchase.
Pay per view purchases are billed with your regular monthly statement for DIRECTV® programming.



Note: You can set spending limits for pay per view purchases using your DIRECTV® High-Definition Receiver's Menu system. See Chapter 6 for details.

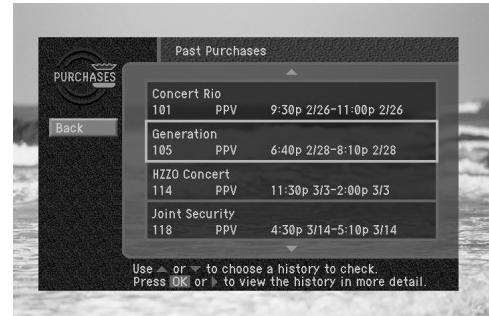
Reviewing your pay per view purchases

Your DIRECTV® High-Definition Receiver allows you to review your past pay per view purchases, to view a list of upcoming pay per view purchases, and to cancel upcoming pay per view purchases.

Viewing your Past Purchase list

To see a list of pay per view programs that you purchased and watched, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Purchases* menu item, then press the OK button.
The *Purchases* menu appears. The *Past Purchases* menu item is highlighted.
- 3 Press the OK button on your remote control to view a list of your past pay per view purchases.
The *Past Purchases* screen appears.
- 4 To see details for the listed purchases, highlight a purchase, then press the OK button.
A screen displaying program details for the selected purchase appears.
- 5 To return to the *Past Purchases* screen, press the BACK button on your remote control.



Note: The *Past Purchases* screen only displays pay per view programs which you purchased *and watched*. Pay per view programs that you purchased but did not watch appear on the *Future Purchases* screen.

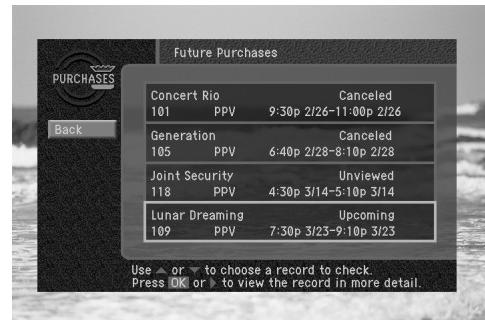
Viewing your Future Purchase list

To see a list of pay per view programs that you purchased but have not yet watched, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Purchases* menu item, then press the OK button.
The *Purchases* menu appears.
- 3 Highlight the *Future Purchases* menu item, then press the OK button.

The *Future Purchases* screen appears.

- 4 To see details for the listed purchases, highlight a purchase, then press the OK button.
A screen displaying program details for the selected purchase appears.
- 5 To return to the *Past Purchases* screen, press the BACK button on your remote control.



The *Future Purchases* screen displays both purchases you have made for programs that have not yet aired, and purchases for past programs which you never watched. Purchases which you have made that have not yet aired can be canceled following the instructions below.

Canceling a pay per view purchase

To cancel the purchase of a pay per view program that you purchased but have not yet watched, follow these steps:

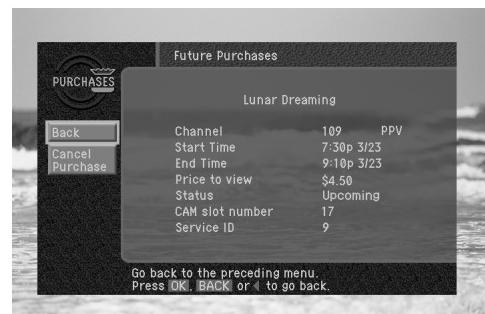
- 1 Press the MENU button on your remote control.
- 2 Highlight the *Purchases* menu item, then press the OK button.
- 3 Highlight the *Future Purchases* menu item, then press the OK button.
- 4 To cancel a purchase, highlight the program purchase you wish to cancel, then press the OK button.

A screen displaying program details for the selected purchase appears.

- 5 Highlight the on-screen *Cancel Purchase* button, then press the OK button.

The Program Detail screen disappears.

The *Future Purchase* screen appears; the purchase you canceled is now listed as canceled.



Note: Past programs which you purchased but never watched cannot be canceled.

Only PPV purchases made from the DIRECTV® High-Definition Receiver may be canceled.

Chapter 5: Program reminders and recording timers

This chapter tells you how to use your DIRECTV® High-Definition Receiver to set timers that can remind you when a program is about to begin, and record a program for you on your VCR. The sections of this chapter include:

- Setting up the VCR control
- Scheduling program reminders and recording timers
- Reviewing and modifying reminders and recording timers

Setting up the VCR control

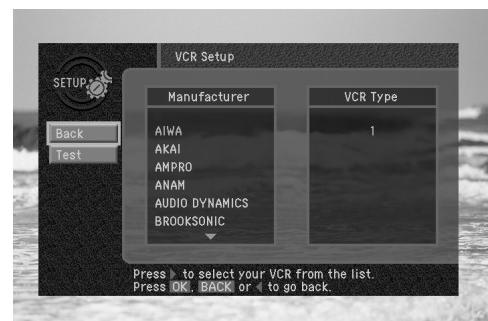
Your DIRECTV HD Receiver can use the supplied VCR control cable to automatically program your VCR to record programs for you. (Instructions on setting recording timers appear later in this chapter).

Before your DIRECTV HD Receiver can program your VCR, you must have correctly connected and aligned the VCR control cable (see *Connecting the VCR control cable* in Chapter 3), and you must tell your DIRECTV HD Receiver what kind of VCR you have. Here's how:

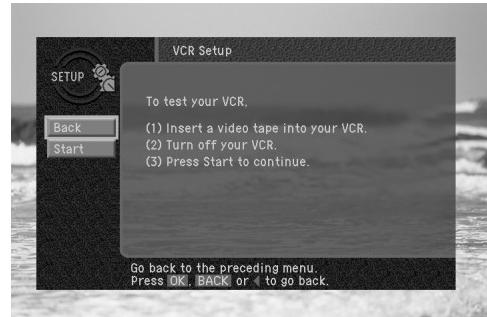
- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Installation* menu item, then press the OK button.
- 4 Highlight the VCR Setup menu item, then press the OK button.

The *VCR Setup* screen appears.

- 5 Highlight the manufacturer of your VCR from the list on the left side of the screen.



- 6 If the VCR type list on the right side of the screen contains more than one type, highlight a type from this list.
Some manufacturers distribute more than one type of VCR. Try them in order until you find the one that passes the test below.
- 7 Highlight the on-screen *Test* button from the left side of the screen, then press the OK button.
A screen appears displaying instructions for testing the VCR setup. Follow the on-screen instructions to see if the VCR manufacturer and Type settings you selected work for your VCR.



During the test, the DIRECTV® High-Definition Receiver will attempt to program the VCR to record for a short time. When the on-screen instructions tell you to do so, check the tape to see if your VCR was able to record the test. If so, your VCR setup is complete. If not, go through the steps in this process again, this time selecting the next VCR Type from the list.

Once you have set up the VCR control, you are ready to use the VCR control to record programs for you. The rest of this chapter describes how to schedule and modify timers that allow you to record programs and set program reminders.

Scheduling program reminders and recording timers

There are two kinds of timers you can set to help you manage your TV viewing:

- You can schedule a reminder to alert you when a program is about to begin.
- You can schedule a timer that will automatically record a program on your VCR.

To set your DIRECTV HD Receiver to remind you when a program is about to begin, or to record a program for you on your VCR, follow these steps:

- 1 Press the GUIDE button on your remote.

The Guide appears.

Note: Timers are not available in the Logo Guide. If you are viewing the Logo Guide, use the red R button on your remote control, and select *Grid Guide*.

You can only set timers for future programs (not for programs that are currently under way).

- 2** Highlight the program you wish to record or be reminded about, and press the OK button.

Pressing the OK button once sets a program reminder. Pressing it again sets the program to be recorded on your VCR.

Today	9:00p	9:30p	10:00p	10:30p
112 PPV	Joint Security	Rose Garden		
113 PPV	Boxing II	HIZO Concert		
114 PPV	Concert Rio	Electric...		
115 PPV	Generation			
116 PPV	Dalma	Super Wrestling		

A clock icon is added to the program listing when a program reminder is scheduled.

Today	9:00p	9:30p	10:00p	10:30p
112 PPV	Joint Security	Rose Garden		
113 PPV	Boxing II	HIZO Concert		
114 PPV	Concert Rio	Electric...		
115 PPV	Generation			
116 PPV	Dalma	Super Wrestling		

A videotape icon replaces the clock icon when a recording timer has been scheduled.

Once you have set a reminder, when the program is about to begin, the DIRECTV® High-Definition Receiver displays a message reminding you about the program.

To use the program recording feature, you must have correctly connected and positioned the VCR control cable. You must also set up the DIRECTV HD Receiver to communicate with your VCR (see the first section of this chapter).

Make sure there is a tape in your VCR and that the VCR is turned off before the start time of any programs you have set to be recorded.

Reviewing and modifying reminders and recording timers

The *Timers* item in the *SETUP* menu allows you to review, modify, or create new program reminders and program recording timers.

Here's how:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
The *Setup* menu appears.
- 3 Highlight the *Timers* menu item, then press the OK button.

The *Timers* screen appears.

If you have previously scheduled program reminders or recording timers, they are listed here.

- 4 To review your previously scheduled program reminders and recording timers, look through this list.

- 5 To modify or check the details for any previously scheduled timers, highlight that timer from the list, then press the OK button.

To schedule a new program reminder or recording timer, highlight a blank line from the list, then press the OK button.

The *Timer #* screen appears.

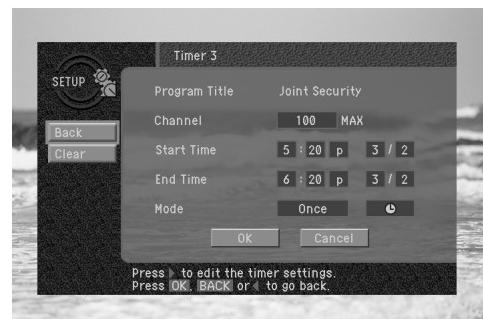
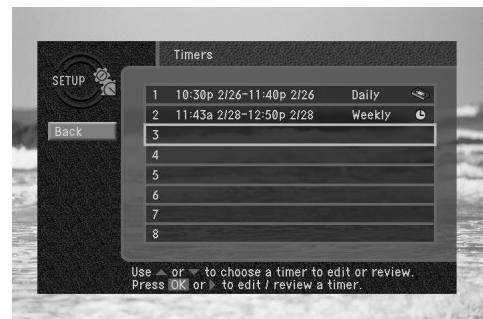
- 6 Highlight the option you wish to change.

- For new timers or for timers you previously scheduled using the *Timers* screen in the *SETUP* menu, you can modify the channel number, the start time and date, the end time and date, the frequency, and the mode for the timer (whether it is a program reminder or a recording timer).
- For timers that you scheduled using the on-screen Guide, you can only change the mode setting.
- Once you have highlighted the option you wish to modify, use the up- or down-arrow buttons on your remote control to edit the option setting. Use the left- and right-arrow buttons to highlight different options.
- To delete the selected timer, use the right-arrow button on your remote control to highlight the on-screen *Clear* button, then press the OK button.

- 7 When you have finished reviewing or modifying the timer, use the right-arrow button on your remote control to highlight the on-screen *Back* button, then press the OK button.

The *Edit Timer* screen disappears, and you return to the *Timers* screen.

- 8 To return to the *SETUP* menu, highlight the on-screen *Back* button, then press the OK button. To exit the Menu system and return to TV viewing, press the EXIT button on your remote control.



Chapter 6: User profiles

This chapter tells you how to modify and select user profiles. Its contents include:

- User profiles basics
- Editing user profile names
- Editing channel lists
- Setting ratings limits
- Allowing or blocking pay per view purchases
- Setting a pay per view spending limit
- Setting the screen color and translucency
- Setting the current user profile
- Locking and unlocking your DIRECTV® System

User profile basics

If your DIRECTV® High-Definition Receiver is going to be used by more than one person in your household, you should consider setting up user profiles for each user.

The *Profiles* section of the Menu system allows you to:

- Set ratings limits for the DIRECTV HD Receiver (applies to all users).
- Set pay per view spending limits for the DIRECTV HD Receiver (applies to all users).
- Edit channel lists for the DIRECTV System, and customized lists for individual users.
- Change the color and translucency of the Menu and Guide screens for each user profile.
- Set which user profile is currently active.
- Lock and unlock the system (controlling when the ratings limits, spending limits, and channel restrictions are active).



There are six user profiles you can choose:

FAMILY:

The *FAMILY* user profile is the master profile for your DIRECTV® High-Definition Receiver. The ratings limits, channel restrictions, and pay per view spending restrictions you set in the *FAMILY* profile apply to all of the user profiles.

USER 1 - USER 4: These four user profiles allow individuals in your household to create custom channel lists and custom screen appearances for their own use. These profiles can be renamed to identify them with members of your household. Ratings, spending, and channel restrictions set in the *FAMILY* profile still apply when one of these four user profiles is the active profile and the system is locked.

ALL CHANNELS: The *ALL CHANNELS* profile is the default user profile.

The *ALL CHANNELS* profile cannot be edited.

When the current user profile is *ALL CHANNELS* and the system is locked, the ratings, spending, and channel restrictions set in the *FAMILY* profile still apply.

Once you have modified the channel lists in the other user profiles, you can use the Program Guide in the *All CHANNELS* profile to see a list of all channels available on your DIRECTV® System (both viewable and blocked channels).

Editing user profile names

The four profiles named User 1 - 4 can be renamed for members of your household. The *FAMILY* and *ALL CHANNELS* profiles cannot be renamed. You can change the names of User 1 - 4 profiles to anything you wish, using up to eight letters and numbers.

- 1 Press the MENU button on your remote control.
The Main menu appears.



- 2 Highlight the *PROFILES* menu item, then press the OK button.

The *PROFILES* menu appears.

- 3 Highlight the profile you wish to rename, then press the OK button.



The menu for that user profile appears. The *Edit User Name* item is highlighted.

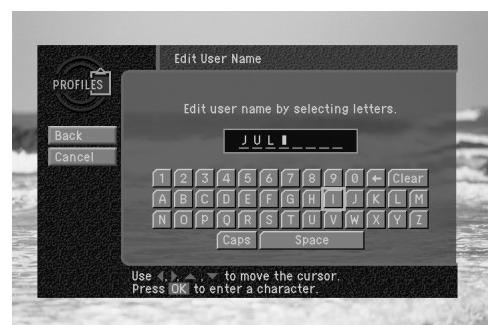
- 4 Press the OK button to start editing the user name for that profile.



The *Edit User Name* screen appears.

- 5 Type a new name for the user profile as described below:

- To type each letter or number in the new name, highlight a key on the on-screen keyboard, then press the OK button. Repeat this until you have typed the entire name.
 - If you need to erase a letter or two, highlight the on-screen left arrow (near the top-right corner of the keyboard), then press the OK button.
 - To erase the entire name, highlight the on-screen *Clear* key, then press the OK button.
- 6 When you have finished typing the user profile name, highlight the on-screen *Back* button, then press the OK button.



Editing channel lists

You can edit channel lists to simplify your channel surfing by removing channels that you never watch from your channel list. Editing a channel list for a user profile has two effects :

- When that user profile is the active profile, it sets which channels are skipped as you change channels with the CH+ and CH- buttons on your remote control.
- When that user profile is the active profile, it determines which channels appear and do not appear in the Program Guide.

It is possible to tune to a channel directly by pressing the 0 - 9 buttons on your remote control even when that channel is removed from the channel list for that profile.

The FAMILY profile is the master profile — channel restrictions set in the FAMILY profile apply to the entire DIRECTV® System (when the system is locked), regardless of which user profile is active. Channels that are removed from the channel list in the FAMILY profile are “blocked” for all profiles — that is, these channels cannot be viewed even when tuned directly using the 0 - 9 buttons on your remote control.

Here are the steps for editing a channel list:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears.
- 3 Highlight the profile containing the channel list you wish to edit (FAMILY, or USER 1 - 4), then press the OK button.
The menu for that user profile appears. The *Edit Channel List* item is highlighted.
Editing the FAMILY channel list changes channel access for all profiles. The ALL CHANNELS profile cannot be edited.
- 4 Press the OK button to start editing the channel list.
The *Edit Channel List* screen appears.



5 Edit the list using the controls as described below.

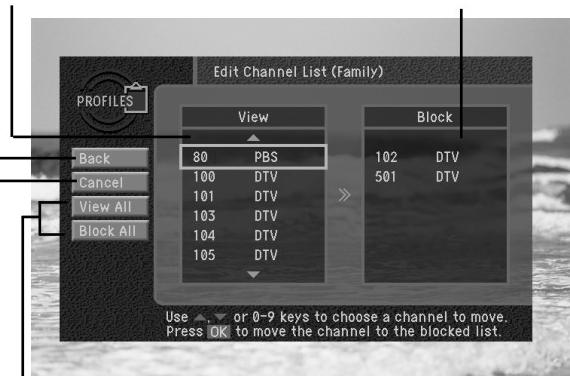
Channels that are removed from the channel list do not appear in the Program Guide, and they are skipped when you change channels with the CH+ and CH- buttons.

Channels included in the channel list. To remove a channel from the list, highlight it, then press OK on your remote control.

Channels not included in the channel list. To add a channel to the channel list, highlight it here, then press OK on your remote control.

When you have finished editing the channel list, highlight *Back*, then press the OK button.

Cancel returns you to the previous screen without changing the channel list.



Move all channels into the *View* list or *Block* list.

6 When you have finished editing the list, highlight the on-screen *Back* button, then press the OK button.

Setting ratings limits

To control the ratings of the programs your family can watch, set ratings limits in the FAMILY profile. Ratings limits set in the FAMILY profile apply to the entire DIRECTV® System no matter which user profile is active (as long as the system is locked).

There are various systems used to rate TV programs. Your DIRECTV® High-Definition Receiver allows you to set limits for the following kinds of ratings:

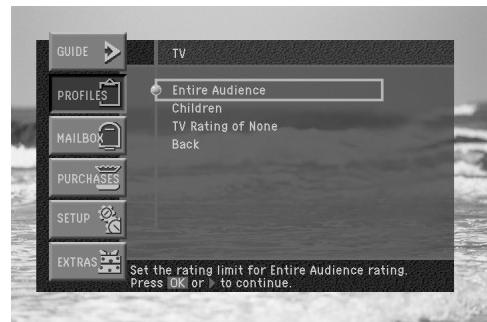
- TV program ratings for the *Entire Audience*.
- TV program ratings specifically for *Children*.
- TV program ratings for unrated programs (*TV rating of none*).
- *Movie* ratings based on the MPAA (Motion Picture Association of America) ratings.

If you have younger TV viewers in your home, you should set the maximum rating for each of these program-types to ensure the most effective ratings control.

Setting the ratings limits for TV programs

To set the maximum viewable TV program rating for the TV programs, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears. The *FAMILY* profile is highlighted.
- 3 Press the OK button to display the *FAMILY* profile menu.
The *FAMILY* profile menu appears.
- 4 Highlight the *Rating Limit* menu item, then press the OK button.
The *Rating Limit* menu appears.
- 5 Highlight the *TV* menu item, then press the OK button.
The *TV* menu appears.
- 6 Highlight the rating option you wish to set, then press the OK button.
The screen you selected appears.



- 7 Use the arrow and OK buttons on your remote control to select the buttons, ratings, or the specific types of content you wish to block your family from viewing. Programs containing blocked content or that are rated at or above the level you select will be blocked when your system is locked.
(See *Locking and unlocking your DIRECTV® System* later in this chapter.)
- 8 When you have finished setting the ratings on one screen, select the on-screen *Back* button.
You return to the *TV* menu. From there you can select the next rating type and continue to set the ratings as described in step 7.

Here are descriptions of the ratings and abbreviations used on the Entire Audience rating screen:

- TV-G: General audience. Although not specifically designed for children, most parents would find this program suitable for all ages.
- TV-PG: Parental guidance suggested. This program may not be suitable for younger children.
- TV-14: Parents strongly cautioned. This program may contain material parents would find unsuitable for children under 14 years of age.
- TV-MA: Mature audience only. This program is specifically designed to be viewed by adults, and is therefore unsuitable for anyone under 17 years of age.
- D: Suggestive dialog.
- L: Coarse language.
- S: Intense sexual situations.
- V: Violence.

Here are descriptions of the ratings and abbreviations used on the Children rating screen:

- TV-Y: All children. This program is designed to be appropriate for all children.
- TV-Y7: Directed to older children. This program is designed to be viewed by children age 7 and above.
- TV-Y7-FV: Similar to TV-Y7, but may include strong fantasy violence (such as fighting by animated characters).

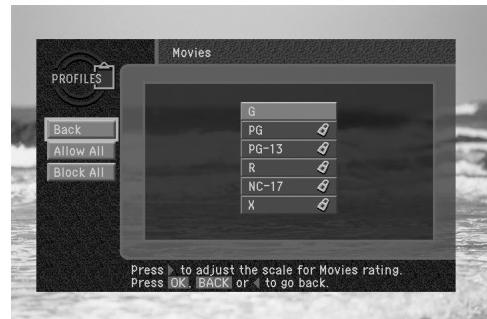
The *TV Rating of None* screen allows you to allow or block programs that are unrated or have a rating of "None."

Setting ratings limits for movies

To set the maximum viewable rating for movies, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears. The *FAMILY* profile is highlighted.
- 3 Press the OK button to display the *FAMILY* profile menu.
The *FAMILY* profile menu appears.

- 4 Highlight the *Rating Limit* menu item, then press the OK button.
The *Rating Limit* menu appears. *Movies* is highlighted.
- 5 Press the OK button to display the *Movies* screen.
The *Movies* screen appears.
- 6 Use the arrow and OK buttons on your remote control to select the ratings you wish to block your family from viewing. Programs that are rated at or above the level you select will be blocked when your system is locked. (See *Locking and unlocking your DIRECTV® System* later in this chapter.)



- 7 To unblock all of the ratings and content types, select the on-screen *Allow All* button. To block all of the ratings and content types, select the on-screen *Block All* button.
- 8 When you have finished setting the ratings on the *Movies* screen, select the on-screen *Back* button.

You return to the *Rating Limit* menu.

Here are descriptions of the ratings used on the *Movies* rating screen:

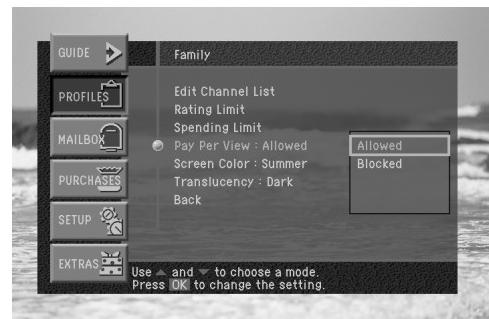
- G: General Audiences. This rating is generally suitable for all audiences.
- PG: Parental Guidance Suggested. Indicates that some parents may find material in this film unsuitable for children.
- PG-13: Parents Strongly Cautioned. Movies with this rating should be investigated by parents before they let children under 13 years of age view the film.
- R: Restricted. Some material not suitable for children 17 years of age or younger. Parents are strongly urged to investigate this film before allowing children to view it with them.
- NC-17: This film contains material that is intended to be viewed by adults only.
- X: This film contains explicit sexual material, and is intended to be viewed by adults only.

Allowing or blocking pay per view purchases

To set whether pay per view programs can be purchased on your DIRECTV® High-Definition Receiver, use the *Pay Per View* option in the *FAMILY* profile menu. The *Pay Per View Allow/Block* setting in the *FAMILY* profile applies any time the system is locked, regardless of which user profile is active.

To set your DIRECTV® High-Definition Receiver to allow or block pay per view purchases:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears. The *FAMILY* profile is highlighted.
- 3 Press the OK button to display the *FAMILY* profile menu.
The *FAMILY* profile menu appears.
- 4 Highlight the *Pay Per View* menu item, then press the OK button.
A list appears, from which you can choose to *Allow* or *Block* pay per view purchases.
- 5 Highlight *Allow* or *Block*, then press the OK button.
The list disappears, and the *Pay Per View* menu item indicates your choice.
- 6 To clear the Menu from your screen, press the EXIT button on your remote control.



Setting a pay per view spending limit

To limit the dollar amount that can be spent for each pay per view program, use the *Spending Limit* option in the *FAMILY* profile menu. Spending limits set in the *FAMILY* profile apply any time the system is locked, regardless of which user profile is active. Here's how to set a spending limit:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears. The *FAMILY* profile is highlighted.
- 3 Press the OK button to display the *FAMILY* profile menu.
The *FAMILY* profile menu appears.
- 4 Highlight the *Spending Limit* menu item, then press the OK button.

The *Spending Limit* screen appears.

- 5 Use the 0 - 9 buttons on your remote control to enter the maximum price allowed for a pay per view program. For example, to block programs that cost over twenty dollars each, you would press 0, 2, 0.
As you press the number buttons the highlight moves to the next digit.
- 6 When you have entered the spending limit, highlight the on-screen *Done* button, then press the OK button.
Your spending limit will now be in effect when the system is locked.
(See *Locking and unlocking your DIRECTV® System* later in this chapter.)



Setting the screen color and translucency

For each of the profiles, you can set the screen color and translucency level used to display Menu and Guide screens. Screen colors can be set for the *FAMILY* profile and the four *USER* profiles. You can also choose from four levels of translucency: Translucency can be set for the *FAMILY* profile and the four *USER* profiles.

To set these screen display options use the *Screen Color* and *Translucency* menu items in the menu for the profile you wish to change.

Setting the current user profile

To set the current user profile (making that profile's channel list, screen color and screen translucency settings active) follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears.
- 3 Highlight the *Set User* menu item, then press the OK button.
The user profile list appears.
- 4 Highlight the profile you wish to make active, then press the OK button.
When you select a user profile, the list disappears, and the profile you selected becomes the current user profile.
- 5 To exit the Menu, press the EXIT button on your remote control.

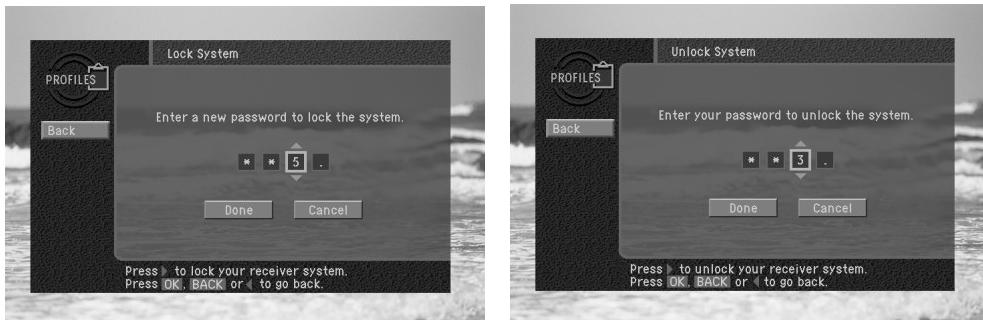
Note: The user profile can also be changed by pressing the WHO button on your remote control while you are watching TV.

Locking and unlocking your DIRECTV® System

If you have set ratings limits, spending limits, or channel lists for your DIRECTV System, you need to lock the system to make those settings take effect. To later change those settings, you will need to unlock the system to access the controls for those settings. Locking the system involves entering a four-digit password. You will need to remember this password to unlock the system. Write down the password and keep it in a safe place. If you forget your password, call DIRECTV or your service provider for assistance.

To lock or unlock the system, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *PROFILES* menu item, then press the OK button.
The *PROFILES* menu appears.
- 3 Highlight the *Lock System* or *Unlock System* menu item, then press the OK button.



When the system is unlocked, the Lock System menu item is displayed. Selecting *Lock System* displays a screen where you can lock the system.

When the system is locked, the Unlock System menu item is displayed. Selecting *Unlock System* displays a screen where you can unlock the system.

- 4 Highlight the first digit in the password.
- 5 Use the 0 - 9 buttons on your remote control to enter a four-digit password. Then highlight the on-screen *Done* button and press the OK button.
If you are locking the system, you will see a second screen asking you to confirm your password (to make sure you entered it correctly).
When you have finished locking or unlocking the system, the *Lock System/Unlock System* screen disappears, and the *PROFILES* menu is displayed.
- 6 To clear the Menu from your screen, press the EXIT button on your remote control.

Chapter 7: Settings, preferences, upgrades, and extras

This chapter tells you how to use the DIRECTV menu system to control the way your DIRECTV® High-Definition Receiver operates. Its contents include:

- Reading your mail
- Setting system preferences
- Reviewing and controlling caller ID
- Setting the *Local Time* options
- Installing a new Access Card
- Viewing important information and a list of features supported by your DIRECTV HD Receiver
- Viewing information on automatic system upgrades
- Viewing fun system extras

Reading your mail

The *MAILBOX* menu item allows you to read the mail sent to you by DIRECTV or your service provider.

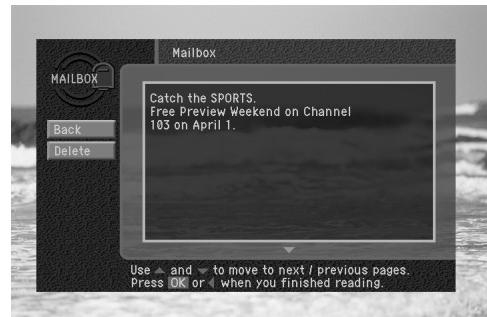
Here's how:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *MAILBOX* menu item, then press the OK button.
The *MAILBOX* screen appears, displaying all of the mail you have received (both read and unread).
- 3 To read one of the pieces of mail, highlight that piece of mail in your mailbox, then press the OK button.



The selected mail message appears.

- 4 To delete the mail message (permanently removing it from your *MAILBOX*), highlight the on-screen *Delete* button and press the *OK* button on your remote control.
- 5 To leave the message in your *MAILBOX* and return to the *MAILBOX* screen, highlight the on-screen *Back* button and press the *OK* button on your remote control.



The mail message disappears, and the *MAILBOX* screen appears.

- 6 To clear the Menu from your screen, press the *EXIT* button on your remote control.

Setting system preferences

The *Setup* menu in your DIRECTV® High-Definition Receiver's Menu system allows you to control many of the functions of the DIRECTV HD Receiver. The first set of items you can control are system preferences. Specifically, these preferences you can set include:

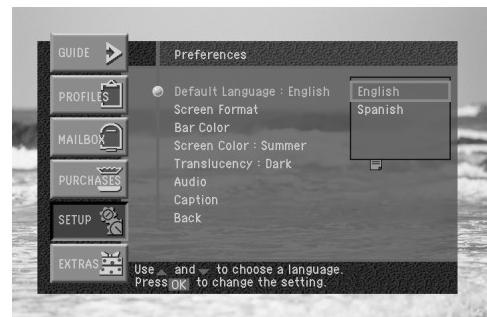
- The language for the on-screen menu system.
- The screen format to use for widescreen program broadcasts.
- The color of bars in Letter box and Pillar box screen formats.
- The closed caption settings.
- The default screen color for Menu and Guide screens.
- The default translucency for Menu and Guide screens.
- A pair of audio settings (language, and PCM or Dolby Digital for digital audio broadcasts).

Setting the language for on-screen Menus and Guides

To choose a language for the Menu and Guide screens, follow these steps:

- 1 Press the *MENU* button on your remote control.
- 2 Highlight the *Setup* menu item, then press the *OK* button.
- 3 Highlight the *Preferences* menu item, then press the *OK* button.

- 4 Highlight the *Default Language* menu item, then press the OK button.
A list of languages you can use for Guide and Menu screens appears.
- 5 Highlight the language you wish to use to display Menu and Guide screens, then press the OK button.
A message appears warning you that your DIRECTV® High-Definition Receiver needs to reboot (turn itself off and on) for the *Default Language* to take effect.
- 6 To change the *Default Language* to the new setting, highlight the on-screen OK button, then press the OK button on your remote control.



Setting the screen format

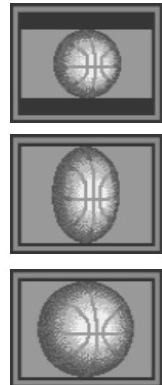
There are two screen formats used in manufacturing TVs and in broadcasting TV programs. These are standard TV format (in which the ratio of the screen width to the screen height is 4:3), and widescreen format (in which the ratio of width to height is 16:9). The *Screen Format* preference tells your DIRECTV HD Receiver how to display a program when the program format does not match your TV format. (Chapter 1 contains a discussion of aspect ratios and screen format options.)

To set the *Screen Format* preference, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
The *Setup* menu appears.
- 3 Highlight the *Preferences* menu item, then press the OK button.
The *Preferences* menu appears.
- 4 Highlight the *Screen Format* menu item, then press the OK button.
The *Screen Format* screen appears.
- 5 Highlight the *Select your TV screen Type* box, then use the up or down arrows buttons on your remote control to set the screen type to match the type of TV you have. Choose 4:3 for a standard TV, or 16:9 for a widescreen TV.
- 6 Use the left and right arrow buttons to highlight the format you wish to use to display programs that do not match your TV screen shape.

For standard 4:3 TVs displaying widescreen broadcasts, your choices are:

- *Letter Box*: Display the entire program image, fit the program to the screen by applying black/gray bars to the top and bottom of the screen.
- *Full*: Display the entire program image, fit the program to the screen by stretching the image vertically so that it fills the screen.
- *Zoom*: Enlarge the image to fill the screen (cropping some of the left and right edges of the program image).



For widescreen 16:9 TVs displaying standard 4:3 programs, your choices are:

- *Pillar Box*: Display the entire program image, fit the program to the screen by applying black/gray bars to the left and right sides of the screen.
- *Full*: Display the entire program image, fit the program to the screen by stretching the image horizontally so that it fills the screen.
- *Zoom*: Enlarge the image to fill the screen (cropping some of the top and bottom edges of the program image).



7 Highlight the on-screen *Back* button, and press the OK button.

Setting the bar color for Letter box and Pillar box

You can set the color of the horizontal and vertical bars displayed in Letter box and Pillar box screen formats by using the *Bar Color* option in the *Preferences* section of the *Setup* menu. The bar color can be set to either black or gray. The gray bar color is already set and is recommended to avoid screen burn-in.

Screen burn-in is a problem that can occur on some TV displays when a dark, stable image is displayed on the screen for an extended period, "burning" the image permanently into the screen. The gray bar color is recommended because lighter colors are less likely to cause burn-in.

Setting the closed caption options

Closed captions are on-screen text versions of the audio content for programs. The *Caption* item in the *Preferences* menu allows you to turn closed captions on and off, to set a language for the closed captions, and to choose a closed caption format (CC1 or CC2, which may provide varying closed caption displays for some programs).

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
- 3 Highlight the *Preferences* menu item, then press the OK button.
- 4 Highlight the *Caption* menu item, then press the OK button.
The *Caption* menu appears.
- 5 Highlight the setting you wish to change, and press the OK button. Then use the up or down arrows buttons on your remote control to highlight an option for that setting. Press the OK button to confirm your selection.
- 6 To exit the Menu system, press the EXIT button on your remote control.



Note: If you turn on closed captions on both your DIRECTV® High-Definition Receiver and your TV, you may see overlapping closed caption displays. To avoid this problem, turn on closed captions on either the TV or the DIRECTV HD Receiver, not both.

Setting the default screen color and translucency

The *Screen Color* menu item in the *Preferences* menu allows you to set a default screen color that will be used to display the Menu and Guide screens. There are four color choices named for the four seasons: Spring (green), Summer (blue), Fall (amber), Winter (violet). Screen colors can also be set for the *FAMILY* profile and the four *USER* profiles; those choices will override the default screen color selection you set here when those profiles are active.

The *Translucency* menu item in the *Preferences* menu allows you to set a default translucency level that will be used to display the Menu and Guide screens (controlling how much TV program content you can view through the on-screen Menu and Guide screens). You can choose from four levels of translucency: Light, Medium, Dark, and Opaque (no translucency). Translucency can also be set for the *FAMILY* profile and the four *USER* profiles; those choices will override the default translucency selection you set here when those profiles are active.

To set a default screen color and translucency, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
- 3 Highlight the *Preferences* menu item, then press the OK button.
- 4 Highlight the *Screen Color* menu item, then press the OK button.

A list appears, showing you the screen color options.

- 5 Highlight a color option, then press the OK button.

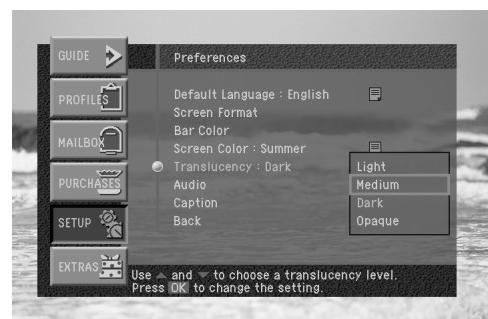
When you select a color, the screen color list disappears, and your color choice is indicated on the *Screen Color* menu item.

- 6 Highlight the *Translucency* menu item, then press the OK button.

A list appears, showing you the translucency options.

- 7 Highlight *Light*, *Medium*, *Dark*, or *Opaque*. Then press the OK button.

When you select a translucency option, the *Translucency* list disappears, and your choice is indicated on the *Translucency* menu item.



Setting the default audio preference

Programs broadcast with digital audio often provide a number of language choices. This preference setting tells your DIRECTV® High-Definition Receiver which language to use for digital audio broadcasts offering a choice of formats.

To set the *Default Audio* preference, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
- 3 Highlight the *Preferences* menu item, then press the OK button.
- 4 Highlight the *Audio* menu item, then press the OK button.

The *Audio* menu appears. The *Default Audio* menu item is highlighted.

- 5 Press the OK button on your remote control to display the list of available languages.

A list of languages appears.

- 6 Highlight the language you wish to use for digital audio broadcasts, then press the OK button.

When you select a language, the Language list disappears. Your selection is indicated in the *Default Audio* line on the *Audio* menu.



Setting the Digital Audio format

If you are using the optical digital audio out jack to connect your DIRECTV® High-Definition Receiver to a digital audio receiver, you should use this preference setting to tell your DIRECTV HD Receiver whether your audio receiver processes PCM digital audio signals or Dolby Digital audio signals. See the manual for your audio receiver if you are not sure.

To set the *Digital Audio* preference, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *Setup* menu item, then press the OK button.
- 3 Highlight the *Preferences* menu item, then press the OK button.
- 4 Highlight the *Audio* menu item, then press the OK button.

The *Audio* menu appears.

- 5 Highlight the *Digital Out* menu item, then press the OK button.

A list appears from which you can choose *Dolby Digital* or *PCM* audio formats.

- 6 Highlight the format supported by your audio receiver, then press the OK button.

When you select a format the *Digital Out* list disappears. Your selection is indicated in the *Digital Out* line on the *Audio* menu.



Reviewing and controlling Caller ID

The *Caller ID* item in the *SETUP* menu allows you to view a list of calls that you have received on the telephone line connected to your DIRECTV® High-Definition Receiver. It also allows you to control whether the *Caller ID* feature is turned on or off. The *Caller ID* feature only works if you subscribe to the caller ID service provided by your local telephone service.

Turning the Caller ID feature on or off

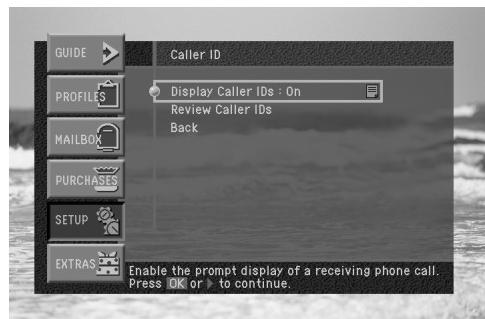
To control whether your DIRECTV HD Receiver captures caller ID information, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Caller ID* menu item, then press the OK button.

The *Caller ID* menu appears.

- 4 Highlight the *Display Caller IDs* menu item, then press the OK button.

A list appears, allowing you to select whether you would like the *Caller ID* feature to be *On* or *Off*.



- 5 Highlight *On* or *Off* from the list, then press the OK button.

The list disappears, and the *Display Caller IDs* menu item on the *Caller ID* menu reflects your choice.

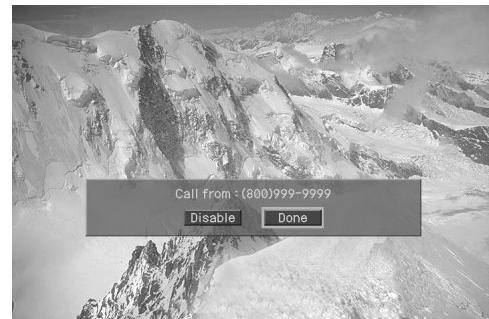
Note: Caller ID messages for incoming calls that occur while you are taping a program will be recorded on your tape. You might want to turn Caller ID off while you are recording a program.

Identifying callers

With Caller ID turned on, when a call is made to the phone line connected to your DIRECTV® High-Definition Receiver, a message appears on your TV screen telling you the number of the caller.

To clear the message from your screen, press the OK button.

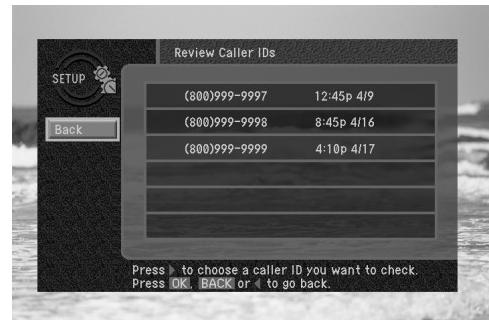
To set your DIRECTV HD Receiver not to display caller ID messages, highlight the on-screen *Disable* button, then press the OK button.



Reviewing your Caller ID list

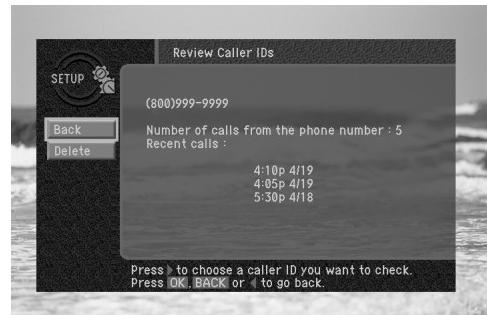
To see a list of calls you have received, follow these steps:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Caller ID* menu item, then press the OK button.
The *Caller ID* menu appears.
- 4 Highlight the *Review Caller IDs* menu item, then press the OK button.
The *Review Caller IDs* screen appears. The calls on the list are sorted in numerical order.
- 5 To see details about any of the listed calls, highlight the call from the list, then press the OK button.



A screen appears displaying the total number of calls received from that phone number and the times and dates for the three most recent calls.

- 6 To delete a Caller ID record, highlight the on-screen *Delete* button, then press the OK button.
- 7 To return to the Review Caller IDs list, highlight the on-screen *Back* button, then press the OK button.



Setting the Local Time options

The *Local Time* setting (in the *Installation* section of the *Setup* menu) allows you to control whether to allow your service provider to automatically control two time settings:

- the time zone your DIRECTV® High-Definition Receiver uses, and
- whether your DIRECTV HD Receiver observes Daylight Savings Time.

If you turn the *Local Time Setting* on, you can choose a time zone and decide whether or not to observe Daylight Savings Time. With the Local Time setting off, your service provider automatically controls these settings for you.

Follow these steps to turn the Local Time Setting on or off, and (if you turn it on) to set your *Time Zone* and *Daylight Savings Time* observance.

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Installation* menu item, then press the OK button.

- 4 Highlight the *Local Time* menu item, then press the OK button.
- 5 To change the *Local Time Setting*, highlight it using the arrow buttons on your remote control, then press the OK button.

A list appears from which you can indicate whether you want the local time setting on (you set the time zone and daylight savings time observance), or off (your program provider controls the time settings).

- 6 Highlight *On* or *Off*, then press the OK button.

The list disappears, and the *Local Time Setting* menu item reflects your choice.

If you turn the *Local Time Setting* off, the *Time Zone* and *Daylight Savings Time* options are controlled by your program provider; these menu items become unavailable.

If you turn the *Local Time Setting* on, continue with the following steps to set your time zone and whether you wish to observe daylight savings time.

- 7 Highlight *Time Zone* menu item, then press the OK button.

A list appears from which you can choose your local time zone.

- 8 Highlight your time zone, then press the OK button.

The list disappears, and the *Time Zone* menu item reflects your choice.

- 9 Highlight the *DST Observation* menu item, then press the OK button.

A list appears from which you can choose to turn Daylight Savings Time observance on or off.

- 10 Highlight *On* or *Off*, then press the OK button.

The list disappears, and the *Status* line indicates either *DST in effect* or *Standard time in effect*.



Installing a new Access Card

Your DIRECTV service provider may send you a new, replacement Access Card. When you receive a new card, follow these steps to continue your DIRECTV® service without interruption:

- 1 Press the MENU button on your remote control.
- 2 Highlight the *SETUP* menu item, then press the OK button.
- 3 Highlight the *Installation* menu item, then press the OK button.
- 4 Highlight the *New Access Card* menu item, then press the OK button.

The *New Access Card* screen appears.

- 5 To start replacing your Access Card, highlight the on-screen *OK* button, then press the OK button.

On-screen instructions tell you how to replace your old card with the new one. Follow these instructions.



Viewing important information and a list of features supported by your DIRECTV® High-Definition Receiver

The *System* menu allows you to view a list of important details about your DIRECTV HD Receiver, as well as a list of features supported by your DIRECTV HD Receiver. To view this information, use the *System Information* and *System Features* items in the *System* portion of the *Setup* menu.

Viewing information on automatic system upgrades

The *System Upgrades* menu item in the *System* menu provides information about the current software on your DIRECTV HD Receiver, and a history of when previous upgrades have been downloaded to your receiver. To View this information, use the *System Upgrades* item in the *System* portion of the *Setup* menu.

Viewing fun system extras

The *Extras* menu contains a useful calendar, a fun biorhythm charting tool, and games you can play. To view the system extras on your DIRECTV HD Receiver, use the items in the *Extras* menu.

Chapter 8: Programming the remote control

This chapter explains how to program your remote control so that you can use it to operate your TV, VCR, or other A/V equipment. Chapter sections include:

- Programming the remote control
- Operating a device with your programmed remote control
- Code lists

Programming the remote control

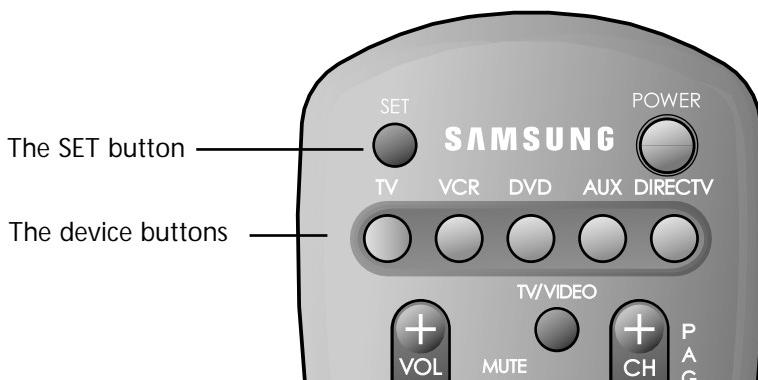
Your DIRECTV® High-Definition Receiver's remote control can be programmed to operate your TV, VCR, DVD player and other A/V equipment. There are two ways to program your remote control:

- Manual method: Using this method, you use the code lists provided in this chapter to enter the code for your brand of TV, VCR, etc. Try this method first; it tends to be faster.
- Scanning method: Using this method, you use your remote control to go through the possible codes sets one at a time until you find one that works for your device. Try this method if there is no code listed for your brand of device, or if the listed codes do not work.

Manual method

To use the manual method to program your DIRECTV HD Receiver's remote control, follow these steps:

- 1 Turn on the device you want to control.
- 2 Aim the DIRECTV HD Receiver's remote control at the device.
- 3 Simultaneously press the SET button and the device button for the device you want to program your remote control to operate, (the TV button, for example). The device button lights up.
- 4 Enter the three-digit code for your device (see the code lists on the following pages).
If the entered code is correct, the device will turn off.
- 5 Press the device button again.
The button should blink twice and then turn off.
- 6 Repeat the procedure for other devices you wish to operate with your DIRECTV HD Receiver's remote control.



Scanning method

To use the scanning method to program your DIRECTV® High-Definition Receiver's remote control, follow these steps:

- 1 Turn on the device you want to control.
- 2 Aim the remote control at the device.
- 3 Simultaneously press the SET button and the device button for the device you want to program your remote control to operate, (the TV button, for example).
The device button lights up.
- 4 Repeatedly press the CH+ or CH- button to scan through the device codes.
The device button will blink each time you press the CH+ or CH- button.
- 5 When the device turns off, stop pressing the CH+ or CH- buttons.
- 6 Press the device button again.
The button blinks twice and then turns off.
- 7 Repeat the procedure for other devices you wish to operate with your DIRECTV HD Receiver's remote control.

Operating a device with your programmed remote control

To operate a device using your programmed remote control, you must first press the corresponding device button (TV, VCR, DVD, AUX, or DIRECTV). Then use the remote control to operate that device. The remote control will continue to operate that device until you press another device button.

Each time you want to switch to a different device with your remote control, you start by pressing a device button.

Code lists

Use these lists to find the codes you need to program your DIRECTV® High-Definition Receiver's remote control to operate your other A/V devices. For brands with multiple codes listed, try the codes in order until you find one that works for your device.

TV

Brand names	Code numbers
ADMIRAL	072 081 160 161
A MARK	112 143
AKAI	070 146
AMSTRAD	052
ANAM	043 054 056 080 112
AOC	070 004 058 112
AUDIOVOX	076 120
BLAUPUNKT	088
CAIRN	206
CANDLE	070 002 003 004
CAPEHART	058
CCE	001 004 024
CETRONIC	043
CITIZEN	070 002 003 004 043 101 103 143
CLASSIC	043
CONCERTO	004
CONTEC	043 050 051
CORONADO	143
CRAIG	043 054 191
CROWN	043 143
CURTIS MATHES	070 101 143 004
CXC	043
DAEWOO	076 103 004 016 043 114 120 127 143 128 136 192 044
DAYTRON	004 143
DYNASTY	043
DYNATECH	062
ELECTROHOME	024 076 120 143

TV (continued)

Brand names	Code numbers
EMERSON	004 005 028 043 047 048 050 051 076 120 143 151 153 154 155 070 096 191
FISHER	007 057
FUJITSU	198
FUNAL	028 043
FUTURETECH	043
GE	160 165 161 070 008 009 034 056 073 074 130 155 167 004 145
GOLDSTAR / LG	004 106 110 112 119 127 143 193
GRADIENTE	004 038 106
HALL MARK	004
HITACHI	011 004 009 010 012 023 075 143 007 072 158
INFINITY	164
JBL	164
JCPENNEY	070 004 008 009 030 065 101 160 024 143 156
JENSEN	013
JVC	038 001 083 034 199
KEC	043
KENWOOD	070 001
KLOSS	002 059
KMC	143
KTV	043 143 154 070
LODGENET	072

TV (continued)

Brand names	Code numbers
LOGIK	072
LAUXMAN	004
LXI	007 015 052 081 160
MAGNAVOX	164 059 070 003 004 060 061 063 064 022 094 127 160
MARANTZ	070 164
MATSUI	164
MEMOREX	004 007 072
METZ	088
MGA	024 070 004 024 028 042
MINERVA	088
MITSUBISHI	024 004 040 042 028 146
MTC	070 004 062 101
NAD	015 025
NEC	070 040 016 056 024 130 134 019 004
NIKEI	043
ONKING	043
ONWA	043
OPTONICA	019 081
ORION	201 202 203 204 205
PANASONIC	034 080 056 164
PHILCO	164 070 003 059 060 064 004 056 063 024
PHILIPS	164 093 038 005 059 127 070 003 004
PIONEER	025 070 004 018 023 190
PORTLAND	004 143 065
PROSCAN	160 161 167 145 065

TV (continued)

Brand names	Code numbers
PROTON	004 058 112 143 171 173
QUASAR	034 056 080 164
RADIO SHACK	004 019 043 127 143
RCA	160 161 145 167156 165 065 070 004 023 024 056 074 152
REALISTIC	007 019 043 047
RUNCO	072 130
SAMPO	207 070 004 058
SAMSUNG	000 101 004 050 089 105 160 127 143 133
SANYO	007 020 053 057 082
SCOTT	004 028 043 048 143
SEARS	015 030 028 094 004 007 057 082 143 160 167
SELECO	200
SHARP	081 004 014 019 022 028 143
SIEMENS	088
SIGNATURE	072
SONY	001 085 126 166 079
SOUNDESIGN	028 003 004 043
SPECTRICON	112
SSS	004 043
SUPRE MACY	002
SYLVANIA	070 003 059 060 063 064 127 160 164 044
SYMPHONICS	194 052
TANDY	081
TATUNG	056 062
TECHNICS	034 080
TECHWOOD	004

TV (continued)

Brand names	Code numbers
TEKNIKA	002 003 004 024 028 043 072 101 143
TELERENT	072
TERA	173
TMK	004
TOSHIBA	015 030 007 040 062 101
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDTECH	004
WARDS	004 019 064 008 009 028 060 061 063 072 074 143 164 165
WESTING HOUSE	076 120
YAMAHA	070 004
YORK	004
YUPITERU	043
ZENITH	072 073 095 103
ZONDA	112

VCR (continued)

Brand names	Code numbers
DAYTRON	108
DIMENSIA	156
DBX	012 023 039 043
DYNATECH	034 053
ELECTROHOME	059
EMERSON	006 029 035 025 027 034 036 037 046 101 129 131 138 017 031 044 152 153 157
FISHER	003 008 009 010
FUNAI	034
GE	031 072 144 147 063 151 107 109 156 126
GO VIDEO	040 132 136
GOLDSTAR / LG	101 123 012 001 114
HARMAN KARDON	012 045
HITACHI	001 026 034 063 137 150 156
HUGHES	001
INSTANTREPLAY	031
JCL	031
JCPENNY	012 001 040 101 156 066
JENSEN	043
JVC	048 050 043 130 060 012 031 150 055 158
KENWOOD	014 034 047 048 023
LLOYD	034
LXI	034 003 009 017
MAGIN	040
MAGNAVOX	067 031 034 041 068 154 160 064
MARANTZ	067 069 031 067 012 023
MARTA	101

VCR

Brand names	Code numbers
AIWA	034
AKAI	016 043 046 124 125 142 146
AMPRO	072
ANAM	031
AUDIO DYNAMICS	012 023 039 043
BROOKSONIC	035 037 044 129 152
CANON	028 031
CAPEHART	108
CRAIG	003 040 135
CURTIS MATHES	031 041 156
DEAWOO	117 119 005 116 007 010 065 108 110 112

VCR (continued)

Brand names	Code numbers
MATSUI	027 030
MEI	031
MEMOREX	102 101 003 010 014 031 034 053 072 139 134
MGA	045 046 059
MINOLTA	001 156
MITSUBISHI	059 061 046 051 142 001 045 162
MTC	034 040
MULTITECH	024 034
NEC	012 023 043 048 039
NORDMENDE	043
OPTONICA	053 054
PANASONIC	070 133 031 066 160 161
PENTAX	001 031 063 156
PHILCO	031 034 067
PHILIPS	031 067 034 101 054 071
PILOT	101
PIONEER	021 001 048
PORTLAND	108
QUARTZ	002 014
QUASAR	070 133 161 031 066 160
RADIO SHACK	123
RCA	107 109 144 147 151 001 041 034 040 156 031 140
REALISTIC	003 008 010 014 031 034 040 053 054 101
RICO	058 078
SALORA	014
SAMSUNG	000 040 032 104 107 109 112 113 115 120 122 125 159

VCR (continued)

Brand names	Code numbers
SANSUI	043 048 135 022
SANYO	003 010 102 007 014 134
SCOTT	017 037 044 129 131 112 159
SEARS	003 008 009 010 001 014 017 081 101
SHARP	031 054 053
SHINTOM	024
SIGNATURE	034
SONY	056 057 058 003 052 149 031 155
SOUNDESIGN	034
STS	001
SYLVANIA	031 059 034 067
SYMPHONIC	034
TANDY	010 034
TATUNG	039 043 023
TEAC	034 039 043 023
TECHNICS	031 070
TEKNIKA	031 019 034 101
TMK	006
TOSHIBA	112 008 131 047 059 082 001 042
TOTEVISION	040 101
UNITECH	040
VECTOR RESEARCH	012
VIDEO CONCEPTS	012 046 034 141
VIDEOSONIC	040
WARDS	003 001 024 031 034 040 053 054 017 131
YAMAHA	012 043 034 039
ZENITH	072 080 056 048 034 101 058

AUX-AUDIO

Brand names	Code numbers
ADCOM	146 149 227 244
AMC	083 084
ARCAM	100
AUDIO FILE	093 098
AUDIO TECHINICA	221
AIWA	111 114 117 156 170 199 203 219 231 241 254
AKAI	181 233
ANAM	180
BOSE	064 137 219
B & K	150 152
CARVER	013 098 107 126 129 160 163 220 245 249
CLARION	151 169
DENON	101 133 191 202 208 246 247
Enlightened Audio	078 153
FISHER	107 129 157 163 176
Fosgate Audionics	228 248
GE	216 123
HARMAN KARDON	073 195 248 249
HAITAI	119
HITACHI	088
JCPENNY	109 154 178
JENSEN	099
JERROLD	141
JVC	112 198 252
KENWOOD	096 104 119 125 148 151 163 171 173 242
KRELL	223
LEXICON	215 250
LUXMAN	066 120 205 229
LXI	123 177
MAGNAVOX	126 162 185 186 224 228

AUX-AUDIO (continued)

Brand names	Code numbers
MARANTZ	074 105 126 128 139 155 162 186 232
MCINTOSH	251
MONDIAL	069 225
MCS	178
MITSUBISHI	253
MERIDIAN	013 067
NAD	128
NAKAMICHI	072 212 234 235
NILES	236
ONKYO	094 115 116 209 211 255
OPTIMUS	121 125 140 181
PANASONIC	131 144 187 200
PARASOUND	085 086 090
PHILIPS	136 186 126 197
PIONEER	093 132 138 210 165 189 195 201 081 230
QUASAR	131 187
RCA	109 213 166
REALISTIC	103 122 123 124 172 174 177 179 180 194
ROTEL	204 218 239
SANSUI	196 214 126 139 075 197
SANYO	157 129
SAMSUNG	068
SCOTT	180 190
SHARP	096 125 151 161 169 182 193
SHERWOOD	089 127
SONY	097 117 147 183 200 253 237 238 188 192
SOUNDSTREAM	197
STARCOM	141
SYMPHONIC	124

AUX-AUDIO (continued)

Brand names	Code numbers
TEAC	102 159 180 062
TECHNICS	131 184 187 200 202 208 165
TOSHIBA	175
WARDS	163
YAMAHA	092 120 166 240 125 169 216
ZENITH	222 061

DVD (continued)

Brand names	Code numbers
RCA	035 036
SAMSUNG	000 040
SHARP	004
SONY	037
TOSHIBA	038 001 206
YAMAHA	039 079
ZENITH	028 041

AUX-CATV

Brand names	Code numbers
HAMLIN	015 017 022
JERROLLOD / G.I.	010 021 025
OAK	008 016 023
PIONEER	007 026 027
Scientific/Atlanta	002 006 013
TOCOM	003
ZENITH	004

DVD

Brand names	Code numbers
ALPINE	009
APEX DIGITAL	075 076
DENON	030 226
GE	035 036
GOLDSTAR / LG	028 041
HARMAN KARDON	217
HITACHI	011
JVC	031
MAGNAVOX	038 042 008
MARANTZ	006 007
MITSUBISHI	032
NAD	077
ONKYO	207
PANASONIC	003 039
PHILIPS	038 042 006 007
PIONEER	034 005 010
PROSCAN	035 036

DVD-LDP

Brand names	Code numbers
CALIFORNIA AUDIO	047
DENON	043 044
FISHER	047
KENWOOD	060
MAGNAVOX	048 057
MITSUBISHI	057
NAD	057
PANASONIC	047 051 054
PHILIPS	048
PIONEER	055 057
QUASAR	047
RCA	046
SANYO	052
SHARP	060
SONY	050 053
TECHNICS	047 051 054
TOSHIBA	060
YAMAHA	045 059

Appendix: Troubleshooting and specifications

Use the tips below to help solve any problems you have with the DIRECTV® High-Definition Receiver:

Troubleshooting

Q: I have no picture and no sound and the POWER light does not light.

A: Make sure your DIRECTV HD Receiver is plugged into a working power outlet. If the outlet is switched, make sure it is turned on. If your DIRECTV HD Receiver is plugged into a power strip, make sure it is plugged in and turned on. Check the batteries in the remote control.

Q: I have sound but no picture.

A: Make sure your TV input (A/V mode) is set properly.
Make sure the A/V cables are properly connected.

Q: I have picture but no sound.

A: Make sure the TV is not being muted.

Q: I have no picture and no sound.

A: Make sure the TV is turned on.
Make sure your DIRECTV HD Receiver is turned on.
Make sure your Access Card is inserted properly into your receiver.
Check the signal strength from the satellite (see *Checking the satellite signal strength* in Chapter 3).
Make sure the coaxial cable is properly connected to the satellite dish.
Check the connections between your DIRECTV HD Receiver and your TV.
Turn your receiver off, unplug it, wait 10 to 20 seconds, then plug it back in, and turn it on.

Q: The top and bottom of the program image is cut off.

A: If you connect your TV to one of the composite video out jacks (Video Out, S-Video Out, or TV out), and you view a high-definition program with the DIRECTV HD Receiver's RESOLUTION switch set to either 720p or 1080i, the picture will be slightly cropped at the top and bottom (the very top and bottom edges of the image will not appear on the TV screen). To avoid this problem, set the RESOLUTION switch to the 480p/i position if your TV is connected to one of the composite video outputs.

Q: I see the message on my TV: "(Due to) Copyright restrictions....."

A: This means that the program you are trying to watch may not be viewed on some outputs. Use a different connection from the DIRECTV HD Receiver to your TV. See the section *Connecting your DIRECTV High-Definition Receiver* in Chapter 3 for more information.

- Q:** I do not see any video with my TV connected to the DVI OUT jack.
- A:** If your TV has a DVI input jack, but is not HDCP compatible, you may not be able to view video from your DIRECTV® High-Definition Receiver's DVI OUT jack. You need to connect your TV using one of the other video output jack on the DIRECTV HD Receiver.
- Q:** I see overlapping closed caption displays for some programs.
- A:** If you turn on closed captions on both your DIRECTV HD Receiver and your TV, you may see overlapping closed caption displays. To avoid this problem, turn on closed captions on either the TV or the DIRECTV HD Receiver, not both.
- Q:** I have a frozen screen and the POWER button doesn't work.
- A:** Unplug your receiver for 10 to 20 seconds; then plug it back in and turn it on. Check the batteries in the remote control.
- Q:** I cannot view a program.
- A:** Make sure your subscription includes the channel you want to watch. Call your service provider if you are not sure.
- Make sure your system is not locked by looking for the locked icon () in the channel banner.
- Q:** I cannot purchase a pay per view program.
- A:** It may be too late to purchase the program. Try purchasing another showing of the same program.
Make sure the telephone line is properly connected.
If your system is locked, make sure the purchase does not exceed your spending or rating limit.
Your Access Card may be full. Call your service provider for assistance.
- Q:** I forgot my password.
- A:** If you have forgotten your password, call your service provider for assistance.

Specifications

Here are the technical specifications for the DIRECTV® High-Definition Receiver.

Power supply

Input Voltage: AC 120V, 60Hz (SMPS type)

Power Consumption: 42W max

Physical Specification

Size (W X H X D): 16.93 in.(W) X 3.15in.(H) X 12.13 in.(D)
(430mm x 80mm x 305mm)

Weight (Net): 3.80 Kg (around 8.37 lbs.)

Operation Temp: +32° F (0° C) to +104° F (+40° C)

Storage Temp: -40° F (-40° C) to +150° F (+66° C)

Video Decoder

Transport stream: MPEG-2 ISO/IEC 13818

Audio Decoder

Audio Decoding: MPEG Layer II & Dolby Digital

Sampling Frequency: 48 kHz

Input/Output Interface

LNB	1 input
Video	2 RCA / Cinch 1 Component video output (Y, Pb, Pr) 1 RGB output 1 DVI output
Audio	6 RCA / Cinch (3 pairs X Left & Right), 1 Optical digital audio output 1 Coaxial digital audio output
S-Video	1 output
RF input & output	2 input, 1 output
VCR control	1 VCR control output
Modem	RJ 11 connector
CH 3/4 Switch	Toggle switch Ch 3 or Ch 4
Resolution select Switch	1080i / 720p / 480p/i
DVI, RGB / Y Pb Pr switch	DVI, RGB / Y Pb Pr
Access Card	1 Access Card slot

Accessories

Cables:	1 RF cable 1 phone cable 1 A/V (RCA) cable 1 S-VIDEO cable 1 DVI cable 1 VCR control cable
Remote control	1 universal remote control (with 2 batteries)
Card	1 Conditional Access Card
Manual	1 Owner's manual

Specifications are subject to change without notice.

Index

A

Access Card
 inserting 17
 installing new 87
Accessories 12
All channels profile 65
Analog TV 3
Arrow buttons 39
Aspect ratio 7
ATSC 3
AUDIO button 56
Audio language 55, 81
Azimuth 30

B

BACK button 39

Batteries 16

C

Cables 19-21
Caller ID 39, 83 - 85
Caption button 39
Caption options 80
Channel banner 41 - 42
Channel list 67
Connections 22 - 26

D

Default
 audio 81
 guide 45
 language 77

Dish type 31 - 33

Dolby Digital 11, 42, 82

DVI 6, 21, 22, 98

E

EXIT button 39

F

Family profile 65, 67
Format button 39

FREEZE button 39

Front panel 13

Full screen format 8, 9, 10

G

Guide
 types of 44
 changing the guide style 44, 49, 53
Grid guide See Program guides
GUIDE button 39, 49, 53

H

HDTV 3
 equipment requirements for 4

HELP button 39, 40

High definition icon 42

I

Icons 42
INFO button 39, 41, 42, 43
Interlacing 5

J

Jacks 19 - 21

L

Language See default
Letterbox 8, 10, 79
Limits See rating limit and spending limit
Local channels 35 - 36
Local networks 35
Locking 74
Logo guide See Program guides

M

Mail
 reading 76

MENU button 39

N

NTSC 3

P

Password 74, 98
pay per view
 canceling 59
 blocking 71
 ordering 57
 reviewing purchases 58
 setting a spending limit 72

Picture-in-guide 47, 51

Pillar box 9, 10, 79

Preferences 77

Problems, solving See Troubleshooting

Profiles 64

Program detail screen 42 - 43

Program guides

- quick guide 44, 46
- grid guide 44, 47
- logo guide 44, 51

Purchases See pay per view

Q

QUICK button 39, 46

Quick guide See Program guides

R

Rating limit 68

Remote control

- buttons 38 - 39
- programming remote control 89
- code list 91

Resolution 5

RGB 21, 23

S

Satellite dish type See dish type

Scan channels 35 - 36

Scheduling See timer

Screen format 7 - 10, 78 - 79

SDTV 3

SEARCH button 39, 53

Searching

- by credits 53
- by title 53
- by text 53
- by category 54

Spending limit 72

System test 34

T

Time

- setting local time options 85

Timer

- reviewing 62
- setting 61

Translucency 73, 80

Troubleshooting 97, 98

TV sources 3

U

Unlocking 74

Unscheduling 43, 62

Upgrades 37, 88

V

VCR

- connecting 25
- control cable 12, 27
- recording 61
- setting up 60

Video output 5, 6

W

WHO button 39, 56

Z

Zoom screen format 8, 9, 10, 79

